ELSEMA
GATE & DOOR CONTROLS

2014 Gate & Door Controls

CATALOGUE

Solar Gates



Industrial Motor Controllers



Receivers





Keyring Remotes

Gate and Door Technology

Since 1978 we have been in research and development of automatic sliding gates, swing gates and industrial roller doors. We are passionate about our work and products supplying innovative solutions to the gate and door automation industry.

The complete production cycle is done by Elsema – from concept, design, testing, assembly, packaging to final quality checks.

Our team strives to put customer service first and use intelligent solutions for our products. We are here for our customers, real people answer the phones and we have specialised engineers who give technical support.

3 Year Warranty

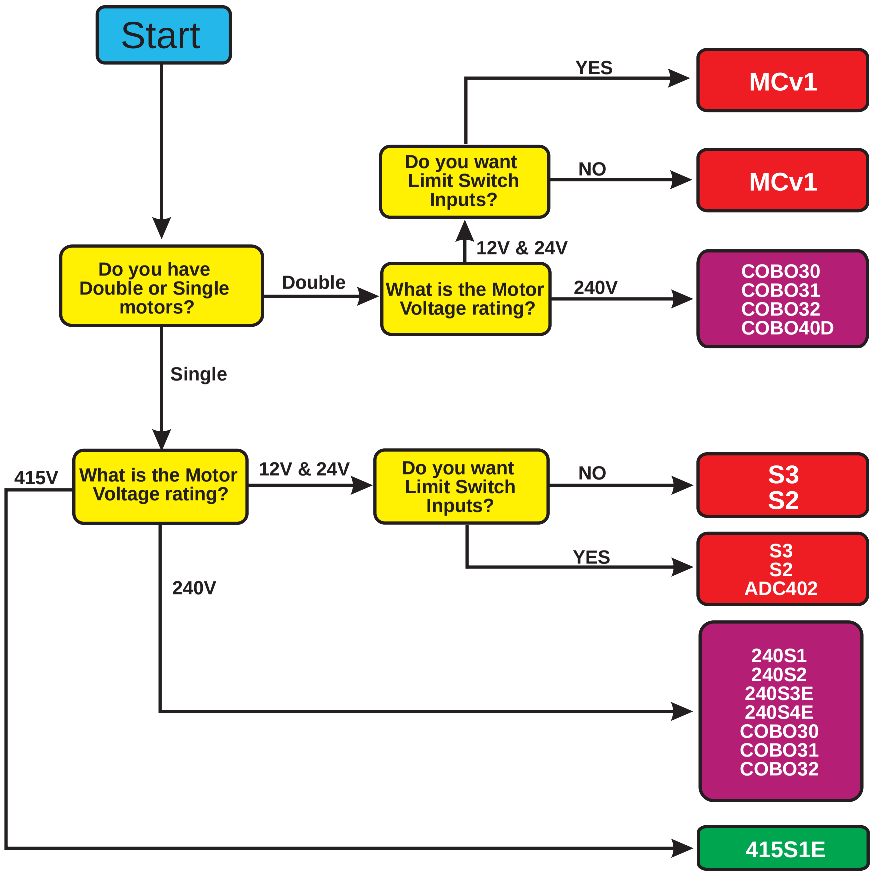
Elsema's 3 year warranty is a clear statement to its customers that the highest possible standard has been used in sourcing components, manufacturing and design of its products. The 3 year warranty applies to products designed and manufactured by Elsema and which are detailed in this catalogue.

Our exclusive lifetime support on components and technical advice guarantees that we are there to service the product long after the sale. The lifetime support on components is for 12 years after the purchase date.



Contents

Gate Controller Selection Guide



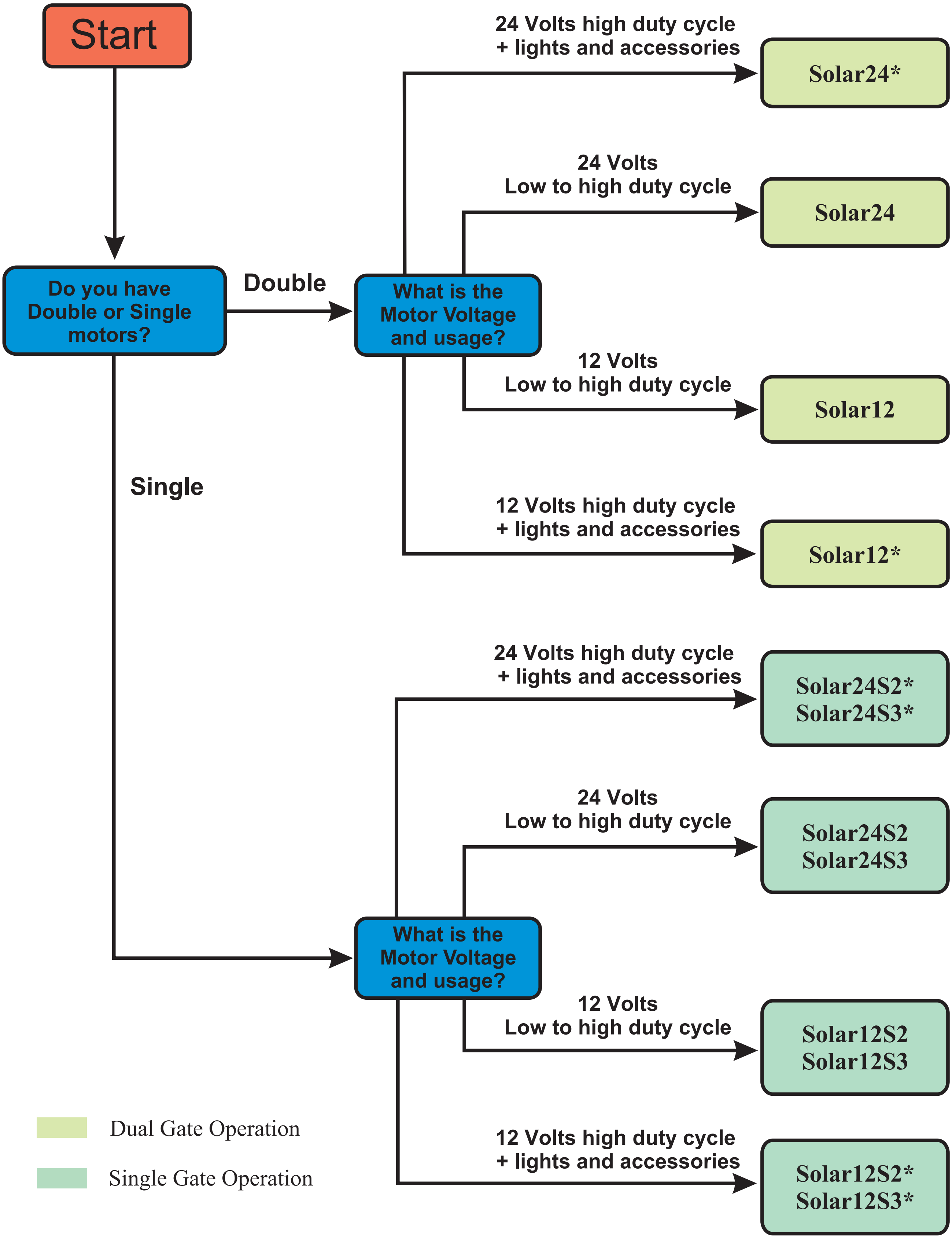
Motor Controller Selection Table

Product	MCv1	S3	S2	ADC402
Motor Voltage	24V / 12V Dual Voltage	24V / 12V Dual Voltage	24V / 12V Dual Voltage	24V / 12V Dual Voltage
Supply Voltage	24VAC or 12VAC	24VAC or 12VAC	24VAC or 12VAC	24VAC or 12VAC
Single or Double	Double or Single	Single	Single	Single
LCD	Yes	Yes	Yes	No
Built-in Charger	Yes	Yes	Yes	No
Soft start, Soft stop	Yes	Yes	Yes	No
Speed Adjustment	Yes	Yes	Yes	No
Travel Timer	Yes	Yes	Yes	No
Obstruction Adjustment	Yes	Yes	Yes	Yes
Limit Switches	Yes	Yes	Yes	Yes
Push Button	Yes	Yes	Yes	Yes
Open Only	Yes	Yes	Yes	Yes
Photo Cell	Yes	Yes	Yes	Yes
Auto Close	Yes, Adjustable 3 to 600 sec.	Yes, Adjustable 3 to 600 sec.	Yes, Adjustable 3 to 600 sec.	Yes, Adjustable 3 to 60 sec.
Receiver Input	Yes, 2 Channels	2 Ch. Receiver Built-in	Yes, 2 Channels	Yes, 1 Channel
Security Close	Yes	Yes	Yes	No
Lock Output	Yes	Yes	Yes	No
Light Output	Yes	Yes	Yes	Yes
Moving Door Indication	Yes	Yes	Yes	No
Dimensions (mm)	140x130x50	140x90x50	140x90x50	116x106x50
Applications	Sliding Gate, Swing Gate and Garage Door	Sliding Gate, Swing Gate and Garage Door	Sliding Gate, Swing Gate and Garage Door	Sliding Gate, Swing Gate and Garage Door

Motor Controller Selection Table

Product	415S1E	240S4E	240S3E	240S1	240S2	COBO40D	COBO30	COBO31	COBO32
Motor Voltage	415VAC	240 VAC 4-wire motor 2 active, 2 neutral	240 VAC 3-wire motor 2 active, 1 neutral	240 VAC	240 VAC	240 VAC	240 VAC	240 VAC	240 VAC
Supply Voltage	240 VAC	240 VAC	240 VAC	240 VAC	240 VAC	240 VAC	240 VAC	240 VAC	240 VAC
Single or Double	Single	Single	Single	Single	Single	Double	Double or Single	Double or Single	Double or Single
Limit Switches	NC or NO User selectable	NC or NO User selectable	NC or NO User selectable	NC or NO User selectable	NC or NO User selectable	Yes, NC (normally closed)	Yes, NC (normally closed)	Yes, NC (normally closed)	Yes, NC (normally closed)
Input Status LED's	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Pedestrian Access	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Travel Timer	Yes, 5 to 90sec. User can extend to 120sec.	Yes, 5 to 90sec. User can extend to 120sec.	Yes, 5 to 90sec. User can extend to 120sec.	Yes, 5 to 90sec. User can extend to 120sec.	Yes, 5 to 90sec. User can extend to 120sec.	Yes, 5 to 58sec. User can extend to 116sec.	Yes, 3 to 30sec. User can extend to 60sec.	Yes, 3 to 45sec. User can extend to 60sec.	Yes, 3 to 45sec. User can extend to 60sec.
Push Button	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Open Only	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Photo Cell	NC or NO User selectable	NC or NO User selectable	NC or NO User selectable	NC or NO User selectable	NC or NO User selectable	NC (normally closed)	NC (normally closed)	NC (normally closed)	NO (normally open)
Auto Close	Yes, Adjustable 3 to 60sec	Yes, Adjustable 3 to 60sec	Yes, Adjustable 3 to 60sec	Yes, Adjustable 3 to 60sec	Yes, Adjustable 3 to 60sec	Yes	Yes	Yes	Yes
Receiver Input	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Security Close	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lock Output	User can configure auxiliary output either as a Light output (60sec) or Lock output (adjustable: minimum is 2sec)					Yes	Yes	Yes	Yes
Light Output						No	No	No	No
Dimensions (mm)	190x290x140	190x290x140	190x290x140	163x94x42	148x120x42	178x137x42	178x137x42	178x137x42	178x137x42
Applications	Commercial Doors, Heavy Duty Roller Shutters, Sectional Doors and Garage doors	Industrial Roller Doors or Garage Doors	Industrial Roller Doors or Garage Doors	Roller Doors, Garage Doors, Sliding & Swing Gates	Roller Doors, Garage Doors, Sliding & Swing Gates	Roller Doors or Garage Doors	Roller Doors or Garage Doors	Roller Doors or Garage Doors	Roller Doors or Garage Doors

Solar Gate Controller Selection Guide



* May require an upgrade. Call Elsema's solar engineer who will guide you to the correct battery size and solar panel for your application.

Solar Powered Automatic Gate Controller Kits

Product	Solar24	Solar12	Solar24S2	Solar24S3	Solar12S2	Solar12S3
Single or Double Gate	Double	Double	Single	Single	Single	Single
Motor Voltage	24 Volts	12 Volts	24 Volts	24 Volts	12 Volts	12 Volts
Deep Cycle Battery (Upgrade options)	12Ah	12Ah	12Ah	12Ah	12Ah	12Ah
Stand-by current	12mA	12mA	19mA	26mA	19mA	26mA
Stand-by use	37 Days	37 Days	24 Days	17 Days	24 Days	17 Days
Solar Panels	20 or 40 Watts	20 or 40 Watts	20 or 40 Watts	20 or 40 Watts	20 Watts	20 Watts
Electronic Obstruction Detection	Yes	Yes	Yes	Yes	Yes	Yes
Easy/Intelligent Learning	Yes	Yes	Yes	Yes	Yes	Yes
Photo Cell	NC or NO User selectable	NC or NO User selectable	NC or NO User selectable	NC or NO User selectable	NC or NO User selectable	NC or NO User selectable
Receiver	PCR43302P	PCR43302P	PCR43302P	Built-in Receiver + 2 x Remotes	PCR43302P	Built-in Receiver + 2 x Remotes
Applications	Sliding, Swing Gates & Garage Doors	Sliding, Swing Gates & Garage Doors	Sliding, Swing Gates & Garage Doors	Sliding, Swing Gates & Garage Doors	Sliding, Swing Gates & Garage Doors	Sliding, Swing Gates & Garage Doors

Features such as auto close, security close, push button, open only, close only, stop, limit switch inputs, lock output, light output are standard and available on all the solar kits.

If extra accessories such as lights, photoelectric beam, loop detector or locks are used, than an upgrade may be required for the solar panel or battery.

Please read through our website as we have done all the research for you on solar kits for gate and door automation. If you are still unsure of which solar kit will meet your requirements, feel free to talk to our expert solar engineer as we are always willing to help you.

Dual Gate Operation   Single Gate Operation

SLIDING GATE OPENERS



- Self learning using intelligent positioning technology
- Ultra quite operation yet powerful
- Lithium-ion battery backup optional
- Waterproof cover design
- Soft start and soft stop
- Suitable for gates up to 500Kg
- Easy installation





TECHNICAL DATA

Power supply	240 Volts AC
Motor supply	24 Volts DC
Max gate weight	500kg
Max absorbed power	80 Watts
Nominal thrust	210N
Nominal input power	2 Amps
Motor speed	12m/min
Duty cycle	20%
Operating temperature	-20°C - +40°C

Kit contents



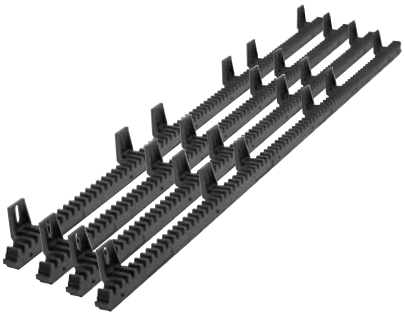
iS500 sliding gate motor



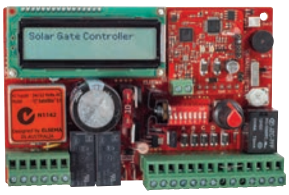
3 x Keyring remotes
with frequency hopping



Long range reflector type
photo electric beam



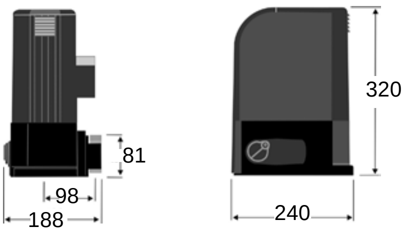
4 x Steel reinforced
Nylon Gear Racks
GR-4



Control card with intelligent
learning an built-in lithium-ion
battery charger



Dimensions



Ordering Code

PART NUMBERS	DESCRIPTION
iS500	Standard iS500 Kit
iS500B	iS500 Kit with Li-ion Backup battery pack
iS500Solar	iS500 Kit with Solar charger and Backup battery pack

Optional Accessories



PentaCode® Keypad

Wireless keypad
compatible with
Pentacode receivers



GSM Gate Opener

Open your gate
with your mobile
phone for free!



Magnetic Lock

- 12 or 24 Volts DC
- Waterproof
- 270Kg or 650Kg



PentaFOB® Programmer

Add, edit or delete
or backup individual
PentaFOB® remotes



Vehicle Detector

- 12, 24 or 240 Volts
- 1 or 2 loops
- Medium or high sensitivity



Flashing Lights

- 12 or 24 Volts DC
- Red, Blue & Amber
- 90 Flashes \ min

iS250 Kit

24 Volt motor, Suitable for gates up to 3 metres and 300Kg

SWING GATE OPENERS

ELSEMA INTELLIGENT SWING®



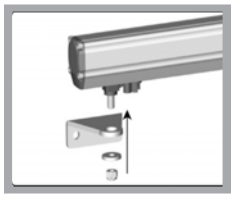
- Cost effective solution for automation of swing gates
- Self learning using intelligent positioning technology
- Die-cast Aluminium motor cover for great durability.
- Mechanical stopper built in the motor for added protection. No stoppers required on your driveway.
- Battery backup (iS250 E7)
- Waterproof cover design
- Soft start and soft stop
- Easy installation



Die-cast aluminum cover. Maximum protection against environment



Manual release located on the bottom side of the motor



Strong and reliable worm shaft. Easy installation



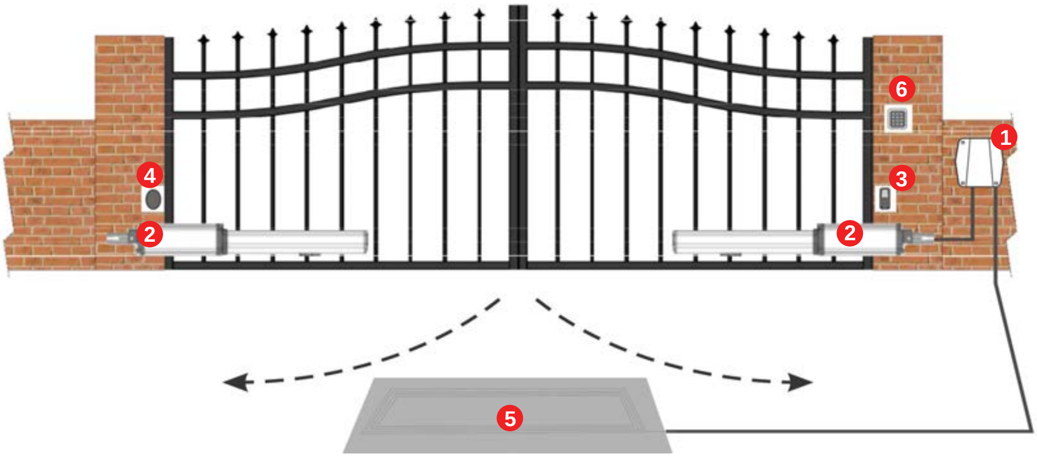


COST EFFECTIVE SOLUTION FOR SWING GATES

TECHNICAL DATA

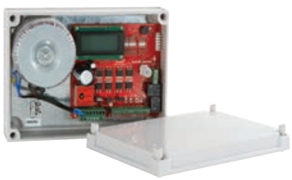
Power supply	240 Volts AC
Motor supply	24 Volts DC
Max gate weight	300kg
Max gate length	3 metres
Peak thrust	3000N
Operation stroke	500mm
Motor speed	25.5mm/sec
Typical gate opening time	10-15sec
Duty cycle	20%
Operating temperature	-20°C~50°C

Typical installation



1	Intelligent control box
2	iS250 motor
3	PE1500 photo electric beam
4	Reflector for PE1500
5	Vehicle detector
6	Wireless Keypad

Kit contents



Intelligent control box with built-in receiver.



iS250 dual swing motors with built-in stopper

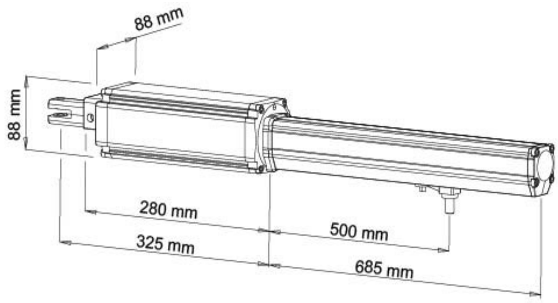


3 x Keyring remotes with frequency hopping



Long range reflector type photo electric beam

Dimensions



Ordering Code

PART NUMBERS	DESCRIPTION
iS250D	Dual swing motor kit
iS250	Single swing motor kit
E7	*Optional battery backup kit

*Please specify battery backup option when ordering

Optional Accessories



PentaCode® Keypad

Wireless keypad compatible with Pentacode receivers



GSM Gate Opener

Open your gate with your mobile phone for free!



Magnetic Lock

- 12 or 24 Volts DC
- Waterproof
- 270Kg or 650Kg



Backup Batteries

24 Volt, 7Ah rechargeable lead acid battery



Vehicle Detector

- 12, 24 or 240 Volts
- 1 or 2 loops
- Medium or high sensitivity



Flashing Lights

- 12 or 24 Volts DC
- Red, Blue & Amber
- 90 Flashes \ min

iS250Solar Kit

24 Volt motor, Suitable for gates up to 3 metres and 300Kg

SOLAR SWING GATE OPENERS

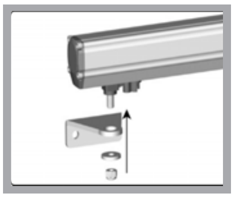
ELSEMA INTELLIGENT SWING®



- Cost effective solution for automation of swing gates
- Intelligent Voltage doubler using only one solar panel and one 12 Volt battery for 24 Volt motor operation
- Self learning using intelligent positioning technology
- Mechanical stopper built in the motor for added protection. No stoppers required on your driveway.
- Waterproof cover design
- Soft start and soft stop
- Easy installation


Die-cast aluminum cover. Maximum protection against environment


Manual release located on the bottom side of the motor


Strong and reliable worm shaft. Easy installation




Single solar panel

+


Voltage doubler with single 12V battery

=



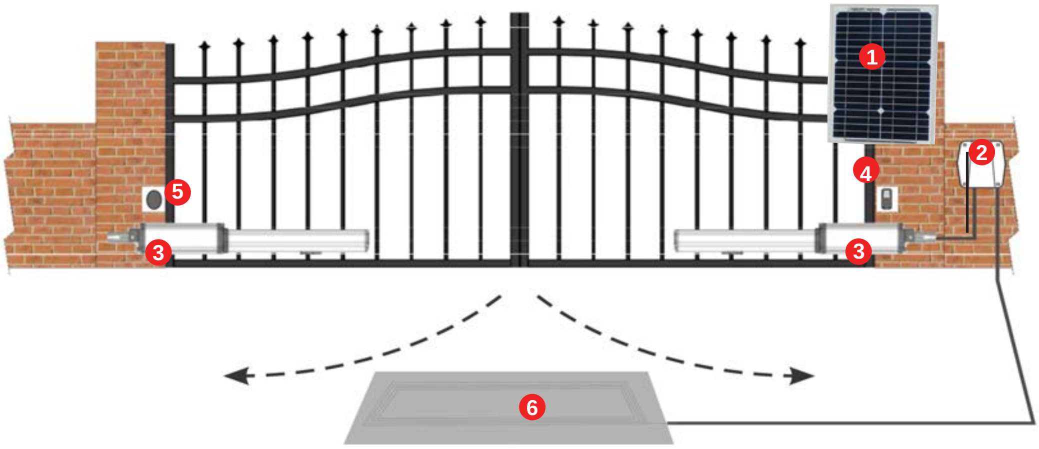
Operates 24 Volt Motors

STRONG AND DURABLE MOTOR FOR SWING GATES

TECHNICAL DATA

Motor supply	24 Volts DC
Max gate weight	300kg
Max gate length	3 metres
Peak thrust	3000N
Operation stroke	500mm
Motor speed	25.5mm/sec
Typical gate opening time	10-15sec
Duty cycle	20%
Operating temperature	-20°C~50°C

Typical installation



1	Solar Panel
2	Intelligent control box
3	iS250 motor
4	PE1500 photo electric beam
5	Reflector for PE1500
6	Vehicle detector

Kit contents



Control box with intelligent voltage doubler



iS250 dual swing motors with built-in stopper

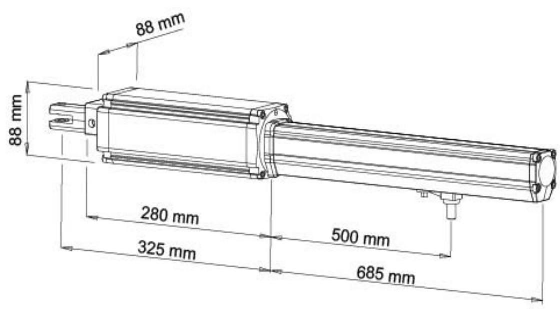


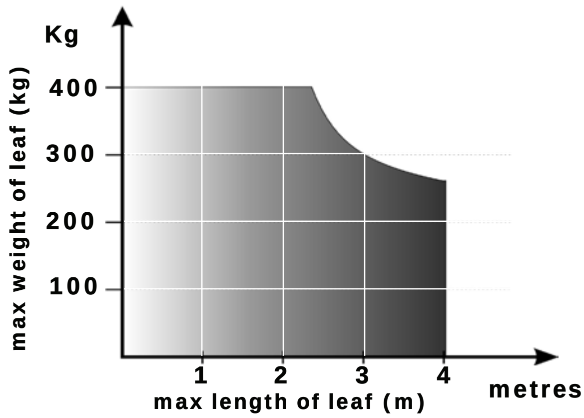
3 x Keyring remotes with frequency hopping



Long range reflector type photo electric beam

Dimensions





Ordering Code

PART NUMBERS	DESCRIPTION
iS250DSolar*	Dual swing motor kit
iS250Solar*	Single swing motor kit

*Solar panels sold seperatly

Optional Accessories



Solar Panels

20, 40 & 60 Watt Solar Panels

- High efficiency monocrystalline silicon solar cells.
- Improved low light performance
- High transparency 3.2mm low iron glass
- Anodized aluminum alloy frame

iS300 Kit

24 Volt motor, Suitable for gates up to 3 metres and 300Kg

SWING GATE OPENERS

ELSEMA INTELLIGENT SWING®



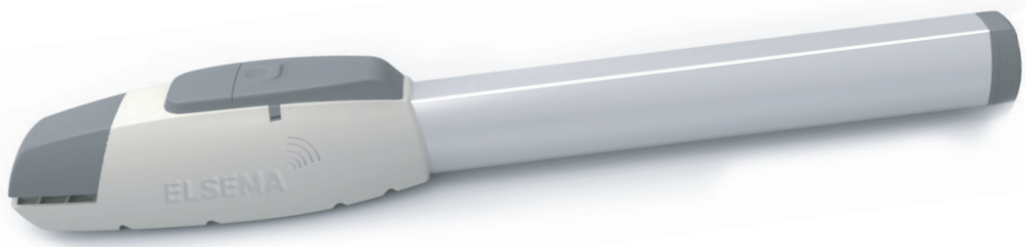
- Self learning using intelligent positioning technology
- Ultra quite operation yet powerful
- Die-cast Aluminium motor cover for great durability.
- Mechanical stopper built in the motor for added protection. No stoppers required on your driveway.
- Battery backup (iS300D E7)
- Waterproof cover design
- Soft start and soft stop
- Easy installation


Die-cast aluminum cover. Maximum protection against environment



Easy manual release located on the top side of the motor


Strong and reliable worm shaft with ø 18mm spherical section



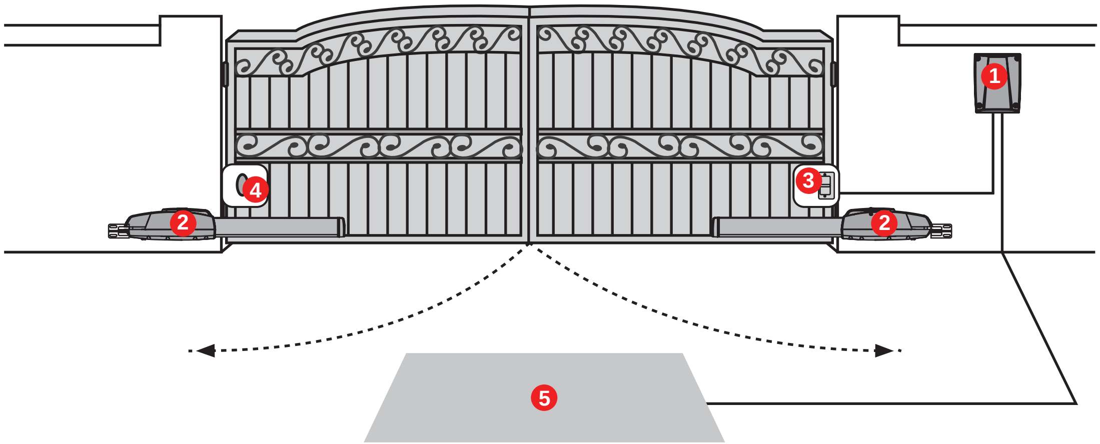


24 VOLTS HEAVY DUTY GEAR MOTOR

TECHNICAL DATA

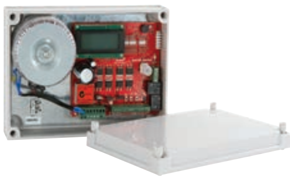
Power supply	240 Volts AC
Motor supply	24 Volts DC
Max gate weight	300kg
Max gate length	3 metres
Peak thrust	3000N
Operation stroke	350mm
Motor speed	25.5mm/sec
Typical gate opening time	10-15sec
Duty cycle	20%
Operating temperature	-20°C~50°C

Typical installation



1	Intelligent control box
2	iS300 motor
3	PE1500 photo electric beam
4	Reflector for PE1500
5	Vehicle detector

Kit contents



Intelligent control box with built-in receiver.



iS300 dual swing motors with built-in stopper

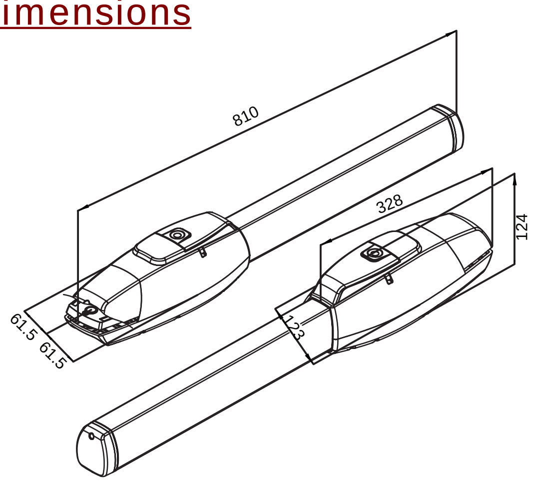


3 x Keyring remotes with frequency hopping



Long range reflector type photo electric beam

Dimensions



Ordering Code

PART NUMBERS	DESCRIPTION
iS300D	Dual swing motor kit
iS300	Single swing motor kit
E7	*Optional battery backup kit

*Please specify battery backup option when ordering

Optional Accessories



PentaCode® Keypad

Wireless keypad compatible with Pentacode receivers



GSM Gate Opener

Open your gate with your mobile phone for free!



Magnetic Lock

- 12 or 24 Volts DC
- Waterproof
- 270Kg or 650Kg



Backup Batteries

24 Volt, 7Ah rechargeable lead acid battery



Vehicle Detector

- 12, 24 or 240 Volts
- 1 or 2 loops
- Medium or high sensitivity



Flashing Lights

- 12 or 24 Volts DC
- Red, Blue & Amber
- 90 Flashes \ min

iS300Solar Kit

24 Volt motor, Suitable for gates up to 3 metres and 300Kg

SOLAR SWING GATE OPENERS

ELSEMA INTELLIGENT SWING®



- Intelligent Voltage doubler using only one solar panel and one 12 Volt battery for 24 Volt motor operation
- Ultra quite operation yet powerful
- Die-cast Aluminium motor cover for great durability.
- Mechanical stopper built in the motor for added protection. No stoppers required on your driveway.
- Waterproof cover design
- Soft start and soft stop
- Easy installation

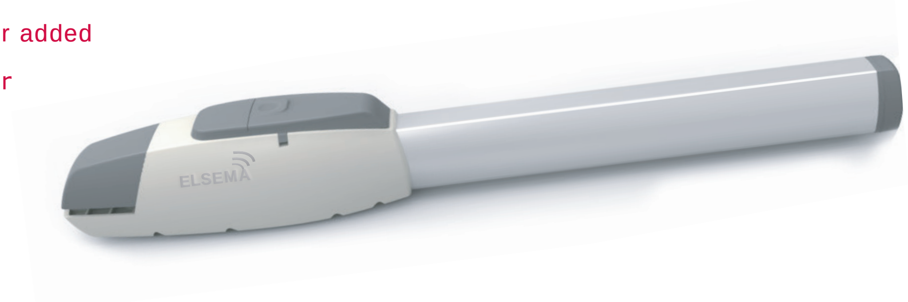


Die-cast aluminum cover. Maximum protection against environment



Easy manual release located on the top side of the motor


Strong and reliable worm shaft with ø 18mm spherical section




+

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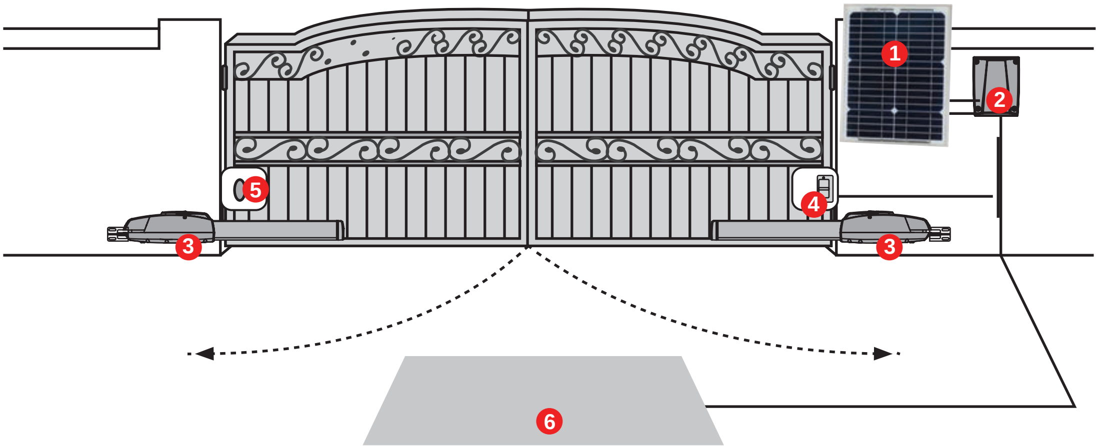

Single solar panel | Voltage doubler with single 12V battery | Operates 24 Volt Motors

24 VOLTS HEAVY DUTY GEAR MOTOR

TECHNICAL DATA

Motor supply	24 Volts DC
Max gate weight	300kg
Max gate length	3 metres
Peak thrust	3000N
Operation stroke	350mm
Motor speed	25.5mm/sec
Typical gate opening time	10-15sec
Duty cycle	20%
Operating temperature	-20°C~50°C

Typical installation



1	Solar Panel
2	Intelligent control box
3	iS300 motor
4	PE1500 photo electric beam
5	Reflector for PE1500
6	Vehicle detector

Kit contents



Control box with intelligent voltage doubler



iS300 dual swing motors with built-in stopper

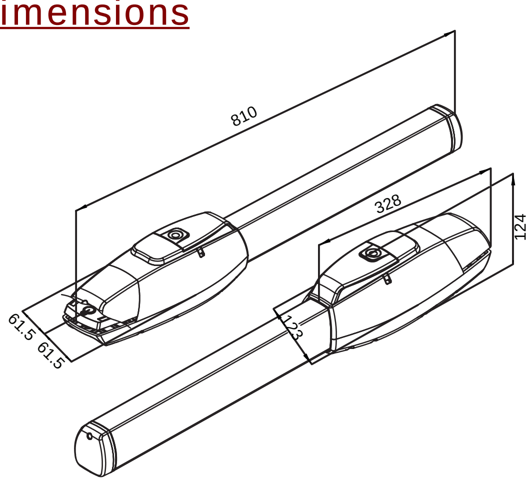


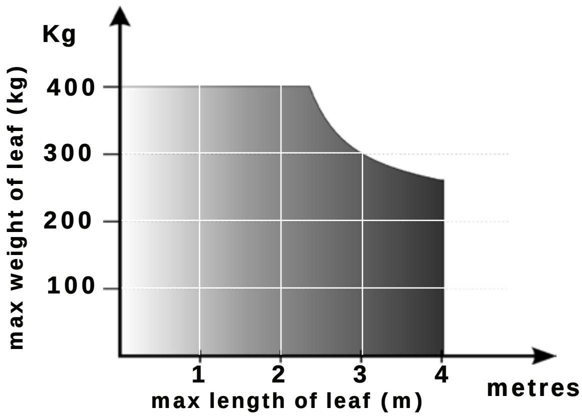
3 x Keyring remotes with frequency hopping



Long range reflector type photo electric beam

Dimensions





Ordering Code

PART NUMBERS	DESCRIPTION
iS300DSolar*	Dual swing motor kit
iS300Solar*	Single swing motor kit

*Solar panels sold seperatly

Optional Accessories



Solar Panels

20, 40 & 60 Watt Solar Panels

- High efficiency monocrystalline silicon solar cells.
- Improved low light performance
- High transparency 3.2mm low iron glass
- Anodized aluminum alloy frame

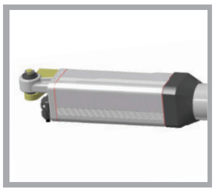
240 Volt motor, Suitable for gates up to 4 metres and 600Kg

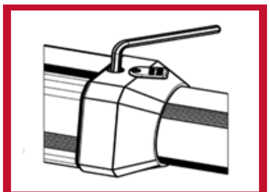
SWING GATE OPENERS

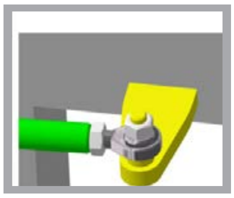
ELSEMA INTELLIGENT SWING®

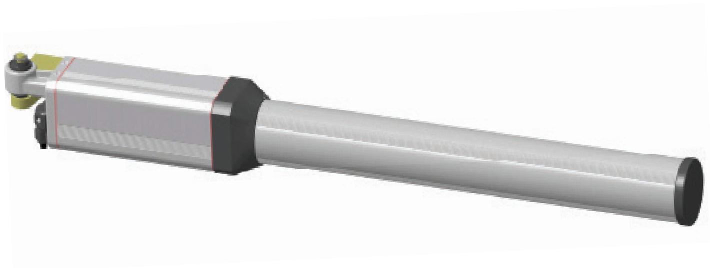


- Easy to setup using, Eclipse Operating System (EOS)
- Powerful hydraulic motors
- Die-cast Aluminium motor cover for great durability
- Mechanical stopper built in the motor for added protection
- Anti-crash & anti-wind adjustment
- Waterproof cover design
- Soft start and soft stop
- Easy installation


Die-cast aluminum cover. Maximum protection against environment


Manual release in case of power shut down


Strong and reliable. Easy installation

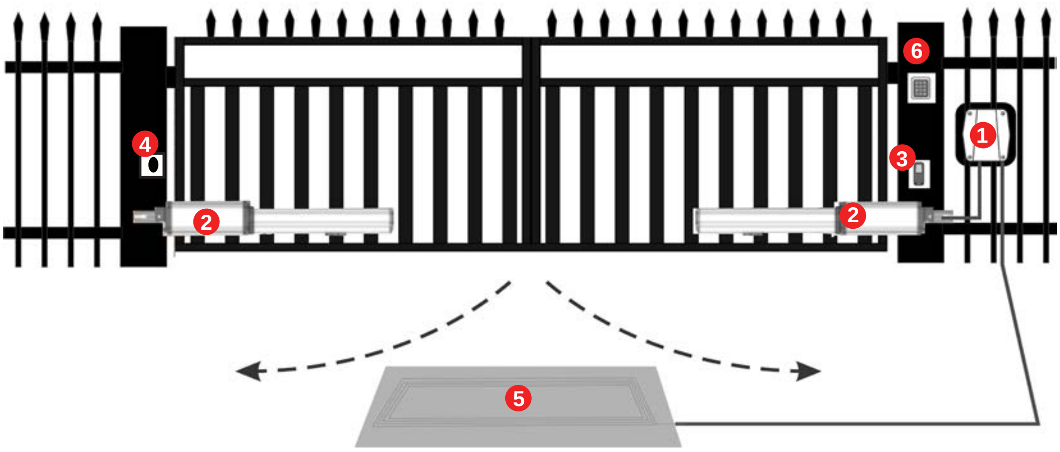


IDEAL SOLUTION FOR DOMESTIC AND LIGHT INDUSTRIAL GATES

TECHNICAL DATA

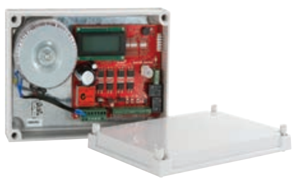
Power supply	240 Volts AC
Motor supply	240 Volts AC
Max gate weight	600kg
Max gate length	4 metres
Max pressure	50bar
Opening cycle	23sec
Closing cycle	28sec
Compression	795Kg
Traction	638Kg
Operating temperature	-20°C~50°C

Typical installation



1	Intelligent control box
2	iS320 motor
3	PE1500 photo electric beam
4	Reflector for PE1500
5	Vehicle detector
6	Wireless Keypad

Kit contents



Intelligent control box with Eclipse operating system



iS320 dual swing hydraulic motors

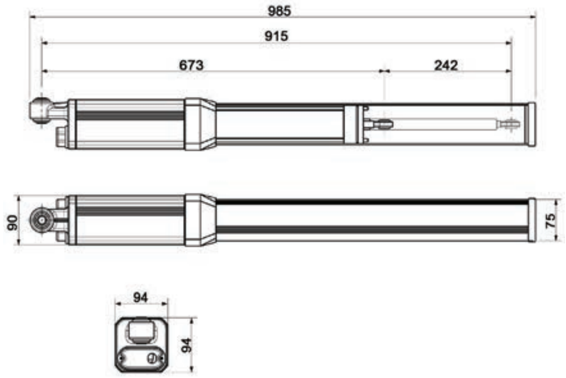


3 x Keyring remotes with frequency hopping



Long range reflector type photo electric beam

Dimensions



Ordering Code

PART NUMBERS	DESCRIPTION
iS320D	Dual swing motor kit
iS320	Single swing motor kit

Optional Accessories



PentaCode® Keypad

Wireless keypad compatible with Pentacode receivers



GSM Gate Opener

Open your gate with your mobile phone for free!



Hydraulic Lock

For gate leaf more than 1.8m, a hydraulic is recommended



Pre-formed Loops

Pre-formed vehicle detector in-ground loops



Vehicle Detector

) 12, 24 or 240 Volts
) 1 or 2 loops
) Medium or high sensitivity



Flashing Lights

) 12 or 24 Volts DC
) Red, Blue & Amber
) 90 Flashes \ min

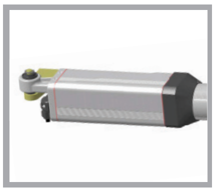
iS330 Kit

240 Volt motor, Suitable for gates up to 6 metres and 600Kg

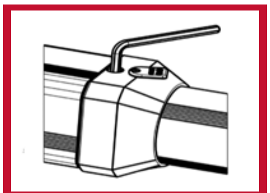
SWING GATE OPENERS



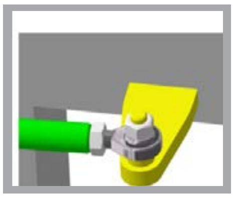
- Easy to setup using, Eclipse Operating System (EOS)
- Powerful hydraulic motors
- Die-cast Aluminium motor cover for great durability
- Mechanical stopper built in the motor for added protection.
- Anti-crash adjustment
- Waterproof cover design
- Anti-wind adjustment
- Soft start and soft stop
- Easy installation



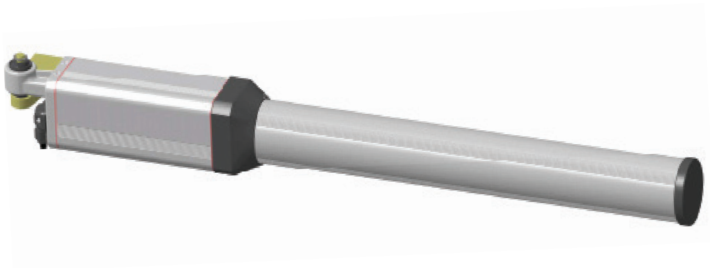
Die-cast aluminum cover. Maximum protection against environment



Manual release in case of power shut down.



Strong and reliable. Easy installation

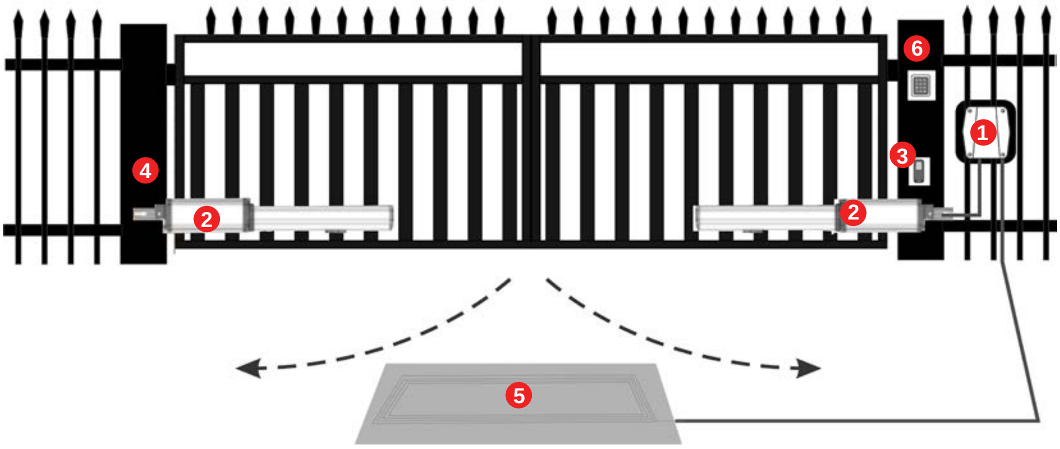


HYDRAULIC POWER FOR GATES WITH UP TO 6 METRE LEAF

TECHNICAL DATA

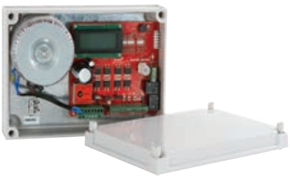
Power supply	240 Volts AC
Motor supply	240 Volts AC
Max gate weight	600kg
Max gate length	6 metres
Max pressure	50bar
Opening cycle	34sec
Closing cycle	40sec
Compression	795Kg
Traction	638Kg
Operating temperature	-20°C~50°C

Typical installation



1	Intelligent control box
2	iS330 motor
3	PE1500 photo electric beam
4	Reflector for PE1500
5	Vehicle detector
6	Wireless Keypad

Kit contents



Intelligent control box with Eclipse operating system



iS330 dual swing hydraulic motors

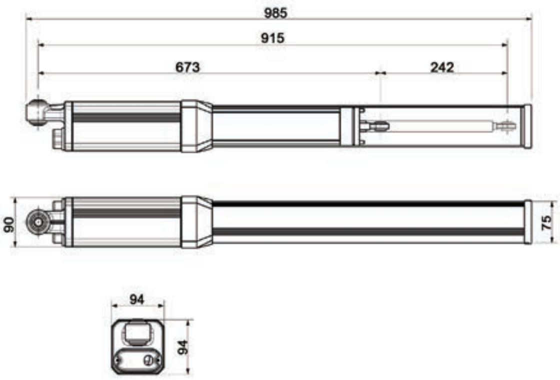


3 x Keyring remotes with frequency hopping



Long range reflector type photo electric beam

Dimensions



Ordering Code

PART NUMBERS	DESCRIPTION
iS330D	Dual swing motor kit
iS330	Single swing motor kit

Optional Accessories



PentaCode® Keypad

Wireless keypad compatible with Pentacode receivers



GSM Gate Opener

Open your gate with your mobile phone for free!



Hydraulic Lock

For gate leaf more than 1.8m, a hydraulic is recommended



Pre-formed Loops

Pre-formed vehicle detector in-ground loops



Vehicle Detector

) 12, 24 or 240 Volts
) 1 or 2 loops
) Medium or high sensitivity

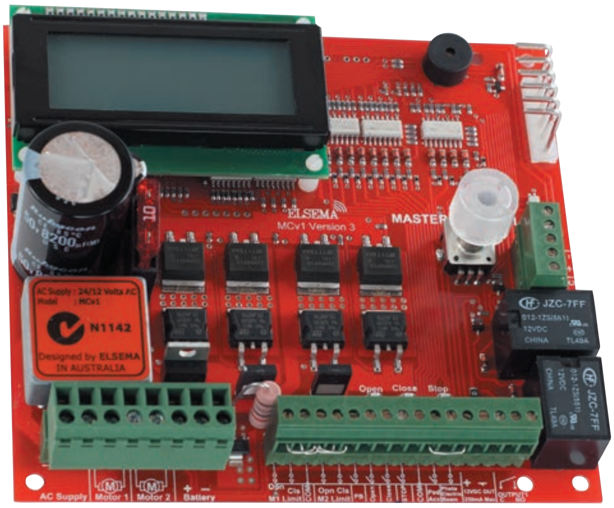


Flashing Lights

) 12 or 24 Volts DC
) Red, Blue & Amber
) 90 Flashes \ min

MCv1 ECLIPSE®

Controller Card for Double 24 or 12 Volt DC Motors
Gate and Door Controller with LCD and Intelligent Technology



MCv1



MC24E2
or
MC12E2

FEATURES

- Suitable for swing and sliding gates
- Double or single motor operation
- 24 or 12 Volt DC motor operation
- Motor soft start and soft stop
- Speed and force adjustment
- Large 4-line LCD to indicate controllers status and setup instructions
- 1-Touch control for easy setup
- Auto profiling using latest intelligent technology
- Various inputs, push button, open only, close only, stop, pedestrian and photoelectric beam
- Supports limit switch inputs or mechanical stops
- Adjustable auto close, obstruction load and pedestrian access
- Adjustable lock and courtesy light outputs
- Variable photoelectric safety beam functions
- Uses industry standard 6 pin receiver input
- Energy saving mode to reduce running costs
- 12 and 24 Volt DC Output to power accessories
- Service counters, password protection, holiday mode and many more features
- Built in 12 and 24 Volt battery charger for backup batteries
- 12mA standby current making it ideal for solar gates

DESCRIPTION

Are you ready for the next Eclipse? Elsema's MCv1 controller is not just the next generation but the industry game changer. We wanted to create a controller that is simple to use and does just about any feature required in the gate and door industry. The MCv1 is not just the next generation but the "Next Transformation" in the gate and door industry creating an Eclipse over previously developed motor controllers.

This new intelligent motor controller is the best match for your automatic gate or door motors.

The intelligent controller was built from the ground up, based on customer feedback and using today's technology. With its rich functions, consumer friendly price and with the focus during development being ease of use and setup makes this controller the ultimate board to control your motors.

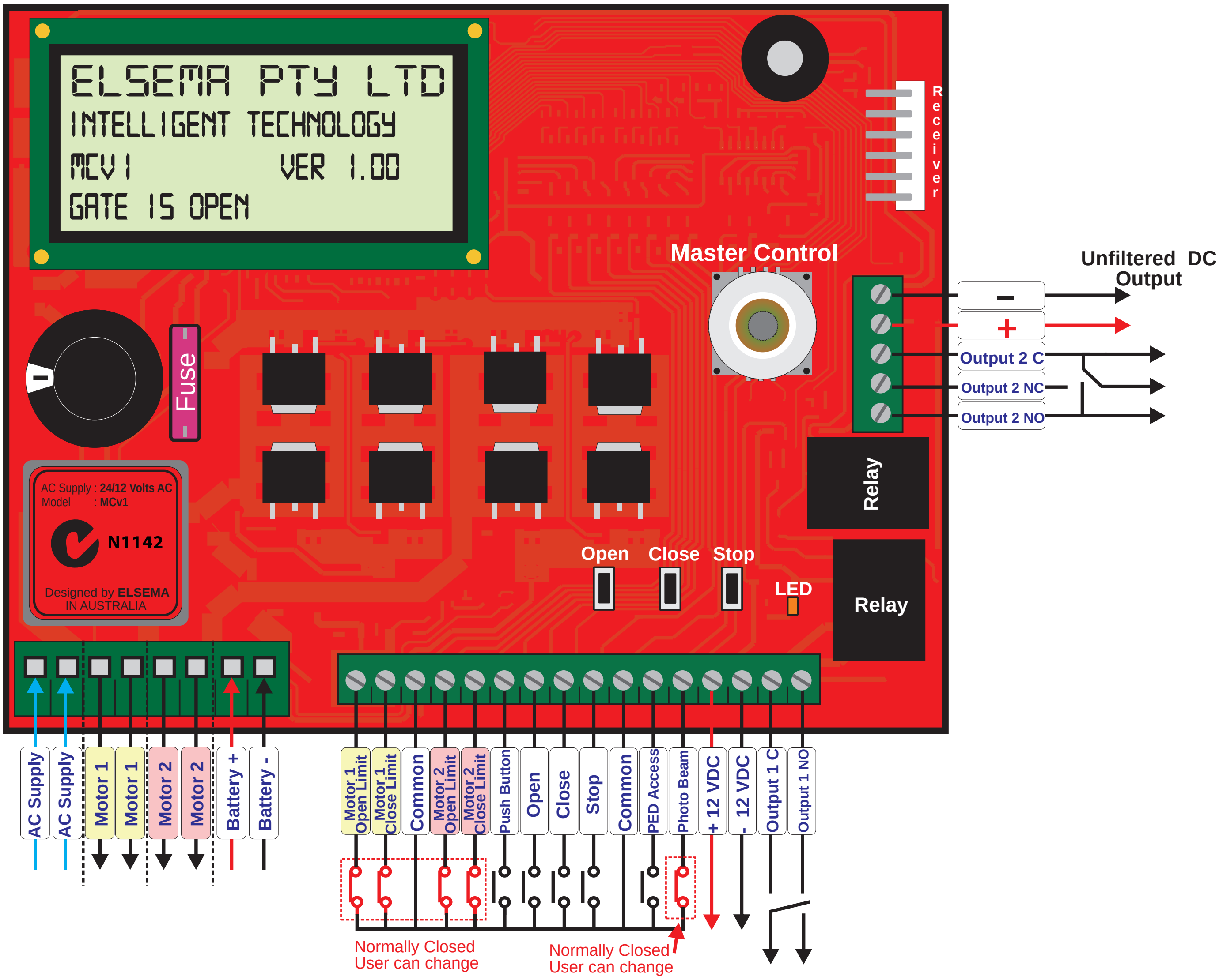
Elsema's easy options to add remote controls or any type of photoelectric beams makes for a very user friendly approach, while avoiding the lockdown approach to accessories.

The control cards are available with an IP66 rated plastic enclosure for outdoor installations, backup batteries with charger or the card only. The MCv1 is also suitable for solar gates with its low standby current of 12mA.

TECHNICAL DATA

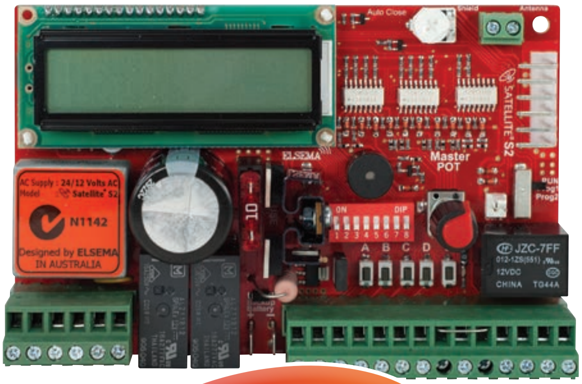
Small Size 140mm x 130mm (Card only)
Suitable for motors up to 12 Amps running current
Standby current 15mA
Can be used with or without limit switches
Test buttons for control inputs
For detailed technical data visit www.elsema.com/auto/mcv1.htm

CONNECTION DIAGRAM



S2 & S3 SATELLITE®

Controller Card for Single 24 or 12 Volt DC Motors
Gate and Door Controller with LCD and Intelligent Technology



Satellite S2



Satellite 24S2E or 12S2E

FEATURES

- Suitable for swing gates, sliding gates and automatic doors
- Automatic 24 or 12 Volt DC motor operation
- Built-in 12 and 24 Volt battery charger
- S3 with built-in Penta receiver for long range remotes
- Motor soft start and soft stop
- Speed and force adjustment
- Filtered 12VDC output for accessories
- Auto profiling using latest intelligent technology
- Supports limit switch inputs or mechanical stops
- LCD to indicate controller's status and setup instructions
- Adjustable auto close, obstruction load and pedestrian access
- Various inputs, push button, open only, close only, stop, pedestrian and photoelectric beam
- Adjustable lock and courtesy light outputs
- Variable photoelectric safety beam functions
- Uses industry standard 6 pin receiver input
- Energy saving mode to reduce running costs

DESCRIPTION

The S2 and S3 is a professional controller for your swing and sliding gates. It includes all the great features of the S1 controller but with the following features added:

• Built-in battery charger

• Twin DC outputs to supply accessories

• Intelligent supply sensing to drive either 12 or 24 Volt DC motors

• Firmware 4.0, which includes custom modes and commonly requested features

• Built-in Penta receiver with enhanced remote control signal finder (S3 model only)

Are you ready to use the next Satellite? The Satellite S2 and S3 was designed to give a cost effective solution for motor controllers yet still enjoy all the benefits of having just about any feature required in the automatic gate industry.

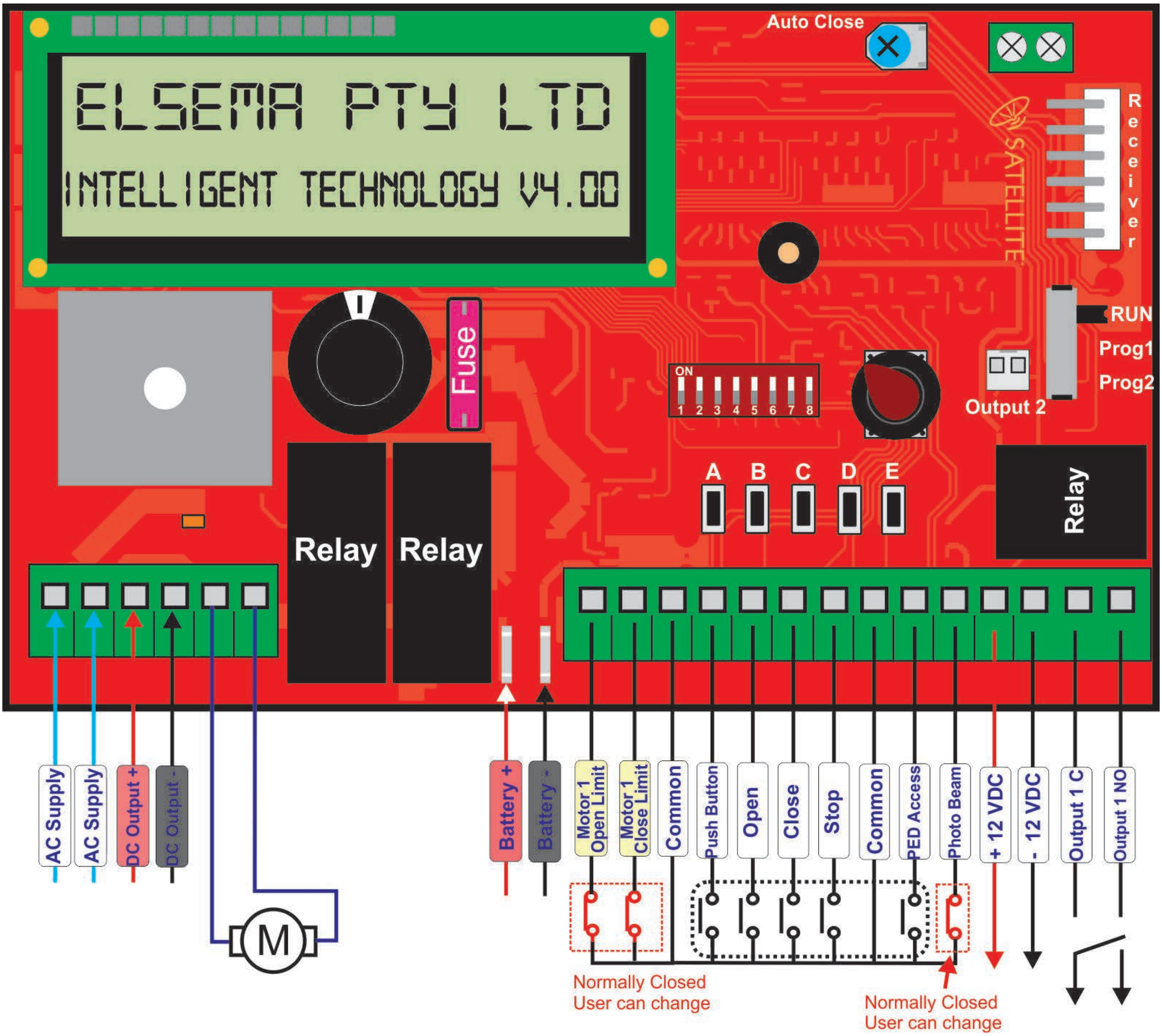
The S2 and S3 was built from customer feedback and using today's technology. With its rich functions, consumer friendly price and with the focus during development being ease of use and setup makes the controllers the ultimate board to control your motors.

With its low standby current, 19mA for S2 and 26mA for S3 it is ideally suited for solar applications.

The controller is available with an IP66 rated plastic enclosure with backup batteries, solar kits or card only.

For detailed technical data visit:
www.elsema.com/auto/s3.htm

CONNECTION DIAGRAM



SOLAR KITS FOR SINGLE GATE

Solar kits for Single 24 or 12 Volt DC Motors
Single Gate Operation

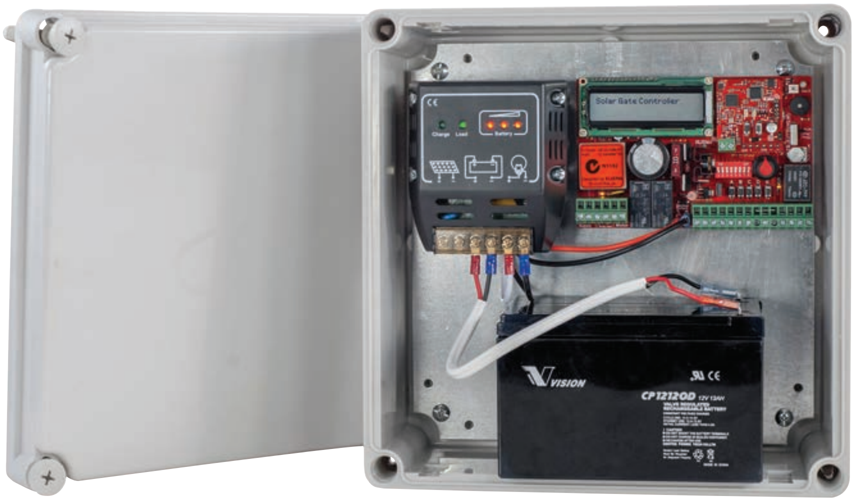
DESCRIPTION

With solar gate kits there is no need to run mains power down to your gates, the gates are powered by solar energy. All Elsema kits use only 1 solar panel and 1 deep cycle 12 Volt battery, even 24 Volt gate motors are powered by the intelligent battery voltage doubler. This makes installation easy and reduces operating costs.

Our kits are assembled and designed in Australia for the Australian conditions. With the use of a weatherproof case, deep cycle batteries and the intelligent control card, the kits will give you many years of reliable and secure use.

Single Gate 24 Volt Motor

Part Number	Solar24S2 * or Solar24S3 *
Battery	Deep Cycle 12Ah
Solar Panel	20 or 40 Watts
Stand-by Use	24 Days (S2) 17 Days (S3)
Extras	S3 includes Built-in Receiver & 2 Remotes



Single Gate 12 Volt Motor

Part Number	Solar12S2 * or Solar12S3 *
Battery	Deep Cycle 12Ah
Solar Panel	20 or 40 Watts
Stand-by Use	24 Days (S2) 17 days (S3)
Extras	S3 includes Built-in Receiver & 2 Remotes



* Depending on the number of accessories an upgrade option is available for the batteries and solar panels. Call Elsema's solar engineer who will guide you to the correct battery size and solar panel for your application.

SOLAR KITS FOR DOUBLE GATES

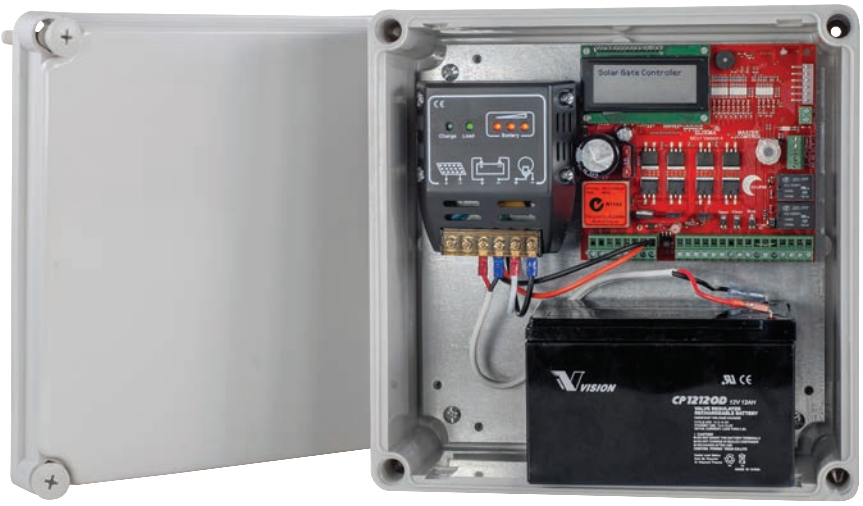
Solar kits for Double 24 or 12 Volt DC Motors
Dual Gate Operation

FREQUENTLY ASKED QUESTIONS

- ***Are deep cycle batteries used?*** For solar gate automation deep cycle batteries must be used.
- ***What is the size of the battery?*** Larger batteries (Higher Ah) will allow more accessories and longer operation before the next charge. This is specified as the Ampere-hour (Ah) of the battery.
- ***What is the stand-by current drain of the control card used in the solar kits?*** The lower the current the better it is since your gates will operate longer with the solar energy. Stand-by currents are usually less than 30mA. Higher stand-by currents will consume more power from your batteries, reducing the solar energy stored.
- ***Where was the control card designed?*** Elsema's control cards are designed in Australia for the Australian conditions. Most of the other control cards on the market are imported from Asia and Europe and are not suitable for the Australian conditions.
- ***What is the size of the solar panel?*** For gate or door automation a 20 or 40 watt panel is usually used. The size will depend on many factors. You can call Elsema's solar engineer who will guide you to the correct size.

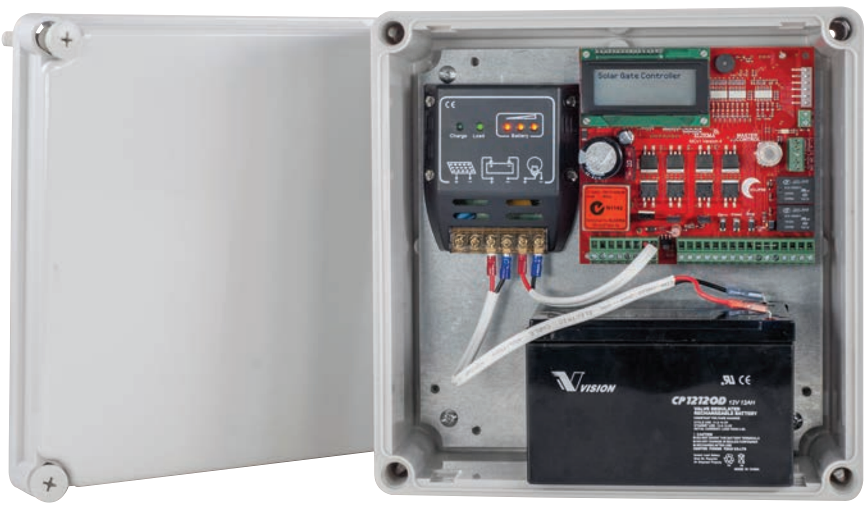
Double Gates 24 Volt Motors

Part Number	Solar24 *
Battery	Deep Cycle 12Ah
Solar Panel	20 or 40 Watts
Stand-by Use	37 Days



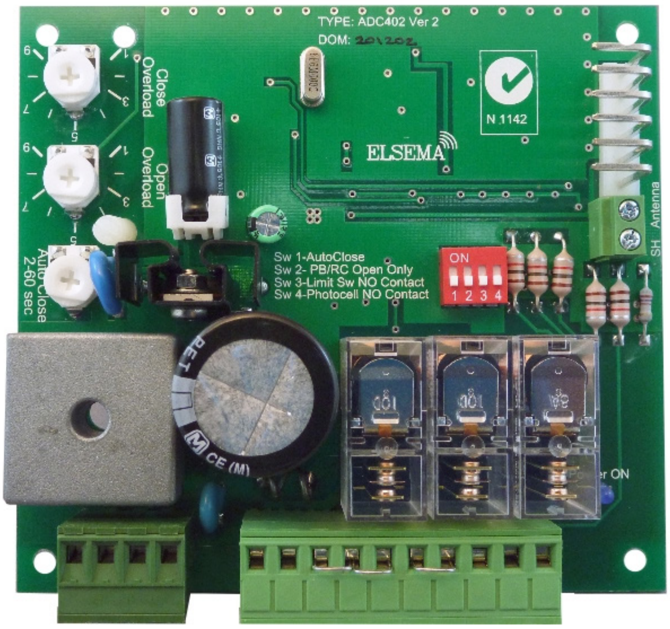
Double Gates 12 Volt Motors

Part Number	Solar12 *
Battery	Deep Cycle 12Ah
Solar Panel	20 or 40 Watts
Stand-by Use	37 Days



ADC402

Controller Card for Single 24 or 12 Volt DC Motors
Automatic Door Controller for DC Motors



FEATURES

- Suitable for automatic gates and doors
- Automatic detection for 24 or 12 Volt supply for controller and motor
- Separate overload adjustment for open and close up to 9 Amps
- Plug in type terminal blocks for easy wiring and servicing
- Adjustable auto close from 2 to 60 seconds
- Inputs for push button, open only, photoelectric beam and limit switches
- Optional battery backup available

DESCRIPTION

The ADC402 has been used in the gate and door industry in Australia and around the world for over 2 decades. It is one of the most cost effective solutions to automate your gate or door.

In fact, there is no other card in the market that comes close to it when it comes to cost per feature price. It has automatic 12 or 24 volt detection, limit switch inputs, obstruction detection, photoelectric beam input, push button input, wireless receiver input, light output and auto close features – all as standard features.

The size of the card is only 115 x 105mm making it very easy to be integrated into existing cases with limited space.

If you are looking for a card with more advanced features and an easy to read LCD, then the S2 or S3 is your solution.

TECHNICAL DATA

Small Size 115mm x 105mm (Card only)

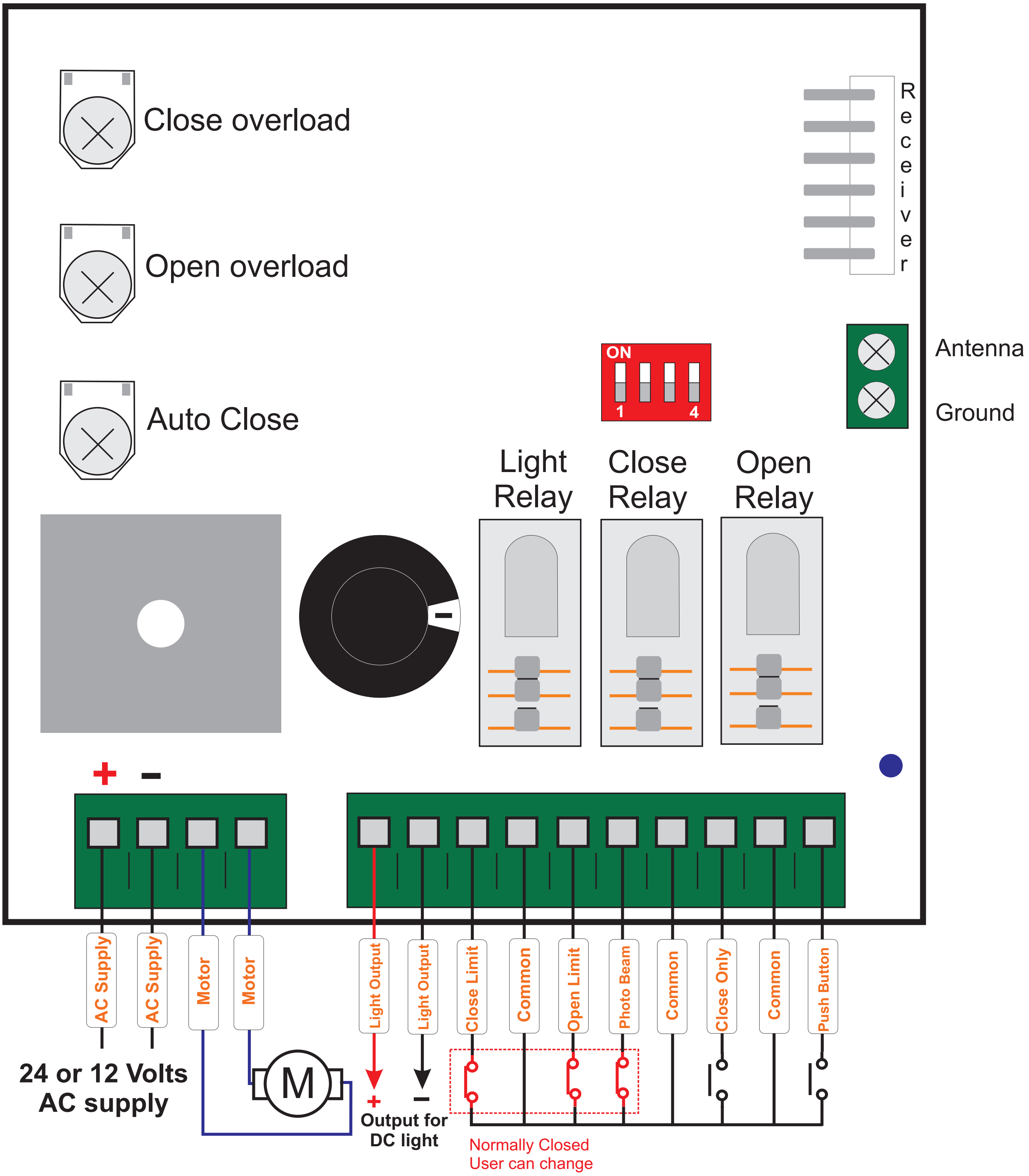
24 or 12 Volts AC supply

Standby current: 19mA at 12 Volts

Limit switch and photo beam input can be set as NO or NC (see dipswitch setting)

For detailed technical data visit www.elsema.com/auto/adc402.htm

CONNECTION DIAGRAM



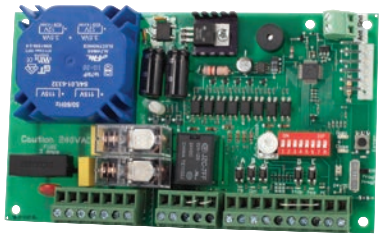
240S1 & 240S2 Series

Controller for Single 240 or 120 Volt AC Motors up to 1.5kW
Used on Light Commercial Doors, Garage and Sliding Gates



With Keyswitch and Push Buttons

240S1 includes Slow Speed and Force Adjustment



FEATURES

- Adjustable auto close
- Slow Speed and motor force (torque) adjustment
- External key switch for safety and security (only on 240S2)
- Dead man controls for open and close buttons
- Automatic ground and travel distance calibration
- Photocell, pedestrian and wireless remote control inputs
- Supports NC or NO limit switch inputs or travel timer setup
- Aux relay output to control courtesy lights and other accessories
- 24VDC output to supply external accessories such as loop detectors, swipe cards etc
- Customised models available upon request

DESCRIPTION

The 240S1 and 240S2 are very similar cards except for the card size and the 240S2 has a key switch input. Offering two different sizes allows the cards to be easily installed into existing cases as replacement or upgrade cards. These two cards are one of our best valued cards on the market, selling for a very competitive price, yet still loaded with many features.

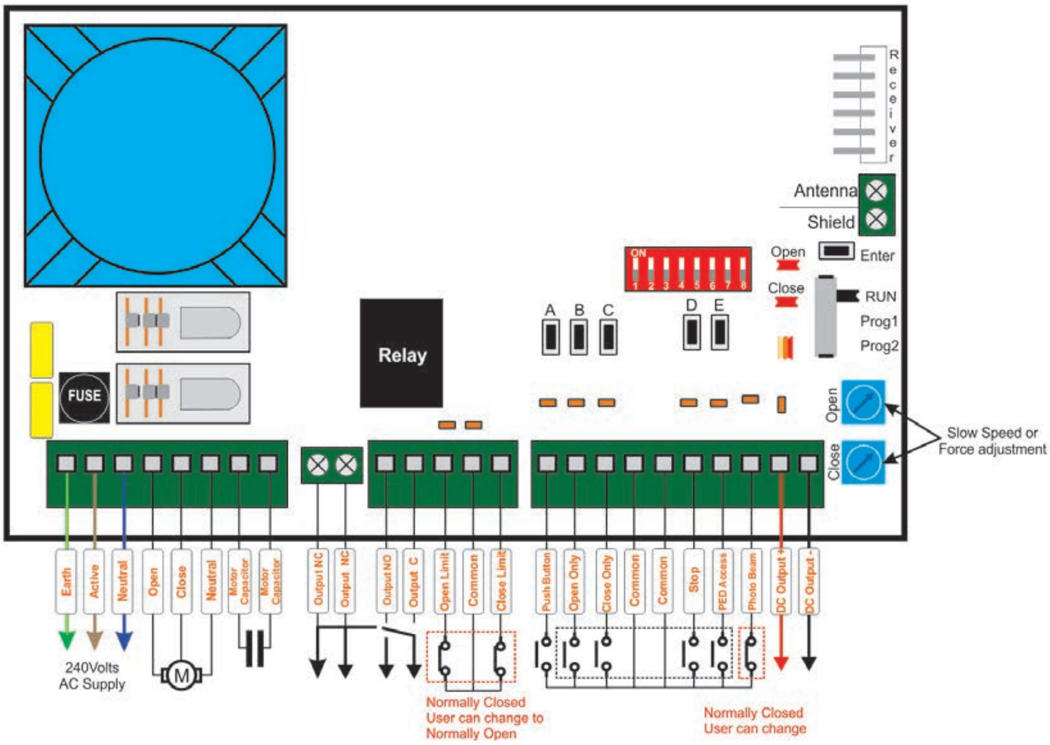
The control cards were built from the ground up, based on customer feedback and using today’s technology. With its rich functions, consumer friendly price and with the focus during development being ease of use and setup makes these 240VAC control cards the ultimate board to control your motors.

TECHNICAL DATA

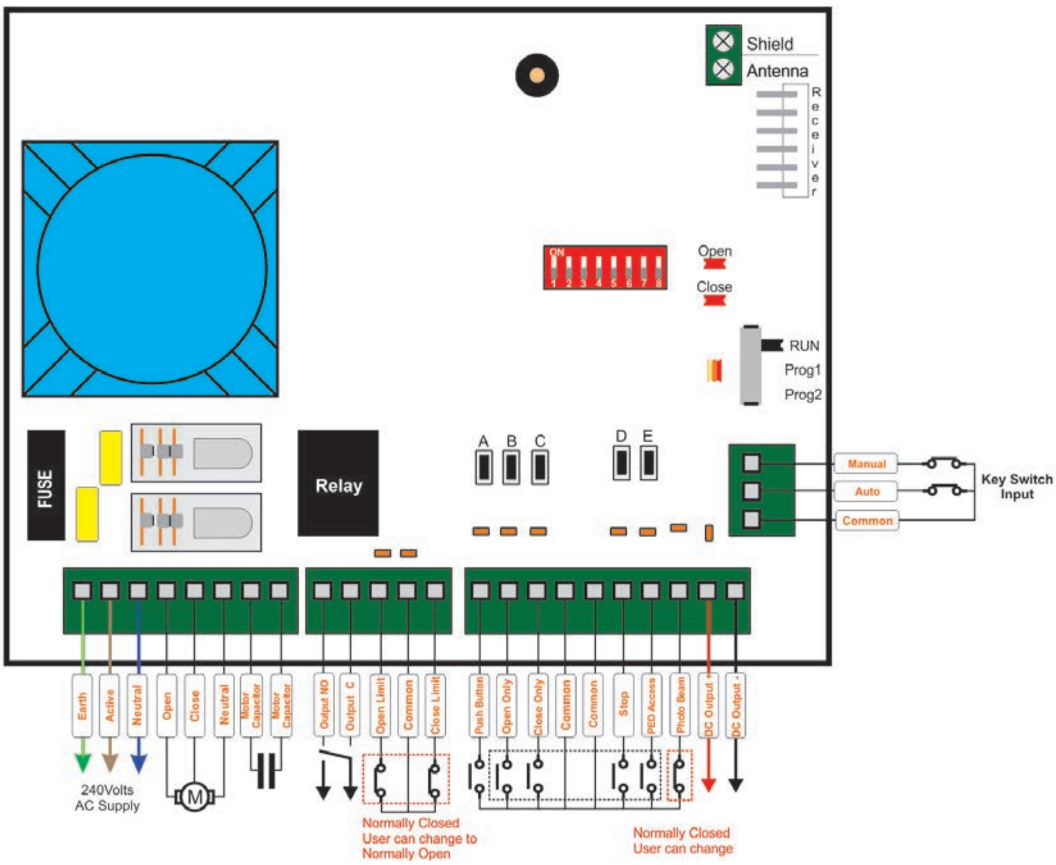
Small Size 240S1: 148 x 94 mm. 240S2: 148 x 120 mm
Suitable for motors up to 1.5kW (2.0Hp). For higher rated motors please see 240S3, 240S4
Can be used with NO or NC limit switches or travel time
Test buttons for control inputs
For detailed technical data visit www.elsema.com/auto/240s1.htm

CONNECTION DIAGRAM

240S1, Motors up to 1.5kW



240S2, Motors up to 1.5kW



240S3E & 240S4E

Controller for Single 240 or 120 Volt AC Motors up to 3kW
Used on Light Commercial Doors, Heavy Duty Cycle Roller Shutters, Sectional Doors, Garage and Sliding doors



With Keyswitch and Push Buttons



240S3E : 3 Wire Motor
or
240S4E : 4 Wire Motor

FEATURES

- Adjustable auto close
- Auto-reset thermal protection
- External key switch for safety and security
- Dead man controls for open and close buttons
- Automatic ground and travel distance calibration
- Photocell, pedestrian and wireless remote control inputs
- Supports NC or NO limit switch inputs or travel timer setup
- Aux relay output to control courtesy lights and other accessories
- 24VDC output to supply external accessories such as loop detectors, swipe cards etc
- Customised models available upon request

DESCRIPTION

The 240S3E and 240S4E industrial controller uses German designed ABB contactors and thermal overloads to control the 240 VAC motor. The 240S3E is for 240 VAC motors using 3 wires and the 240S4E is for 240 VAC motor using 4 wires.

A toroidal transformer is used to power the control card and contactors.

Using a toroidal transformer offers the following advantages:

- Excellent efficiency and low leakage losses reducing your electricity consumption
- High isolation which protects the electronics from noisy power lines
- Low magnetic field radiation and no acoustic noise enabling the controller to pass EMC and other stringent radiation tests

This is the quality you should demand when using 240 VAC motor controllers.

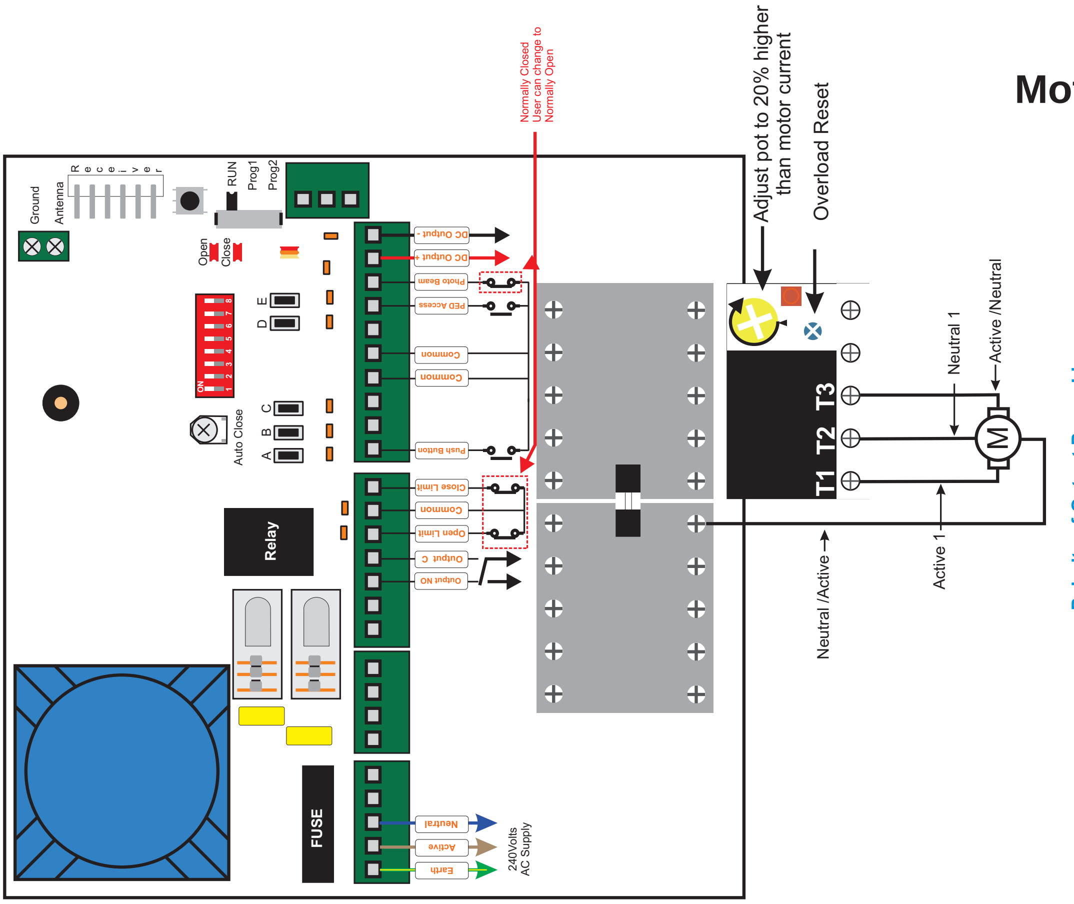
TECHNICAL DATA

Suitable for motors up to 3kW (4.0HP)
Can be used with NO or NC limit switches
Test buttons for control inputs
Dual interlock for added safety
LEDs indicate when inputs are active. A very handy feature during installation or troubleshooting.
For detailed technical data visit www.elsema.com/auto/240s3.htm

CONNECTION DIAGRAM

240S4E

Motors with 4 Wires

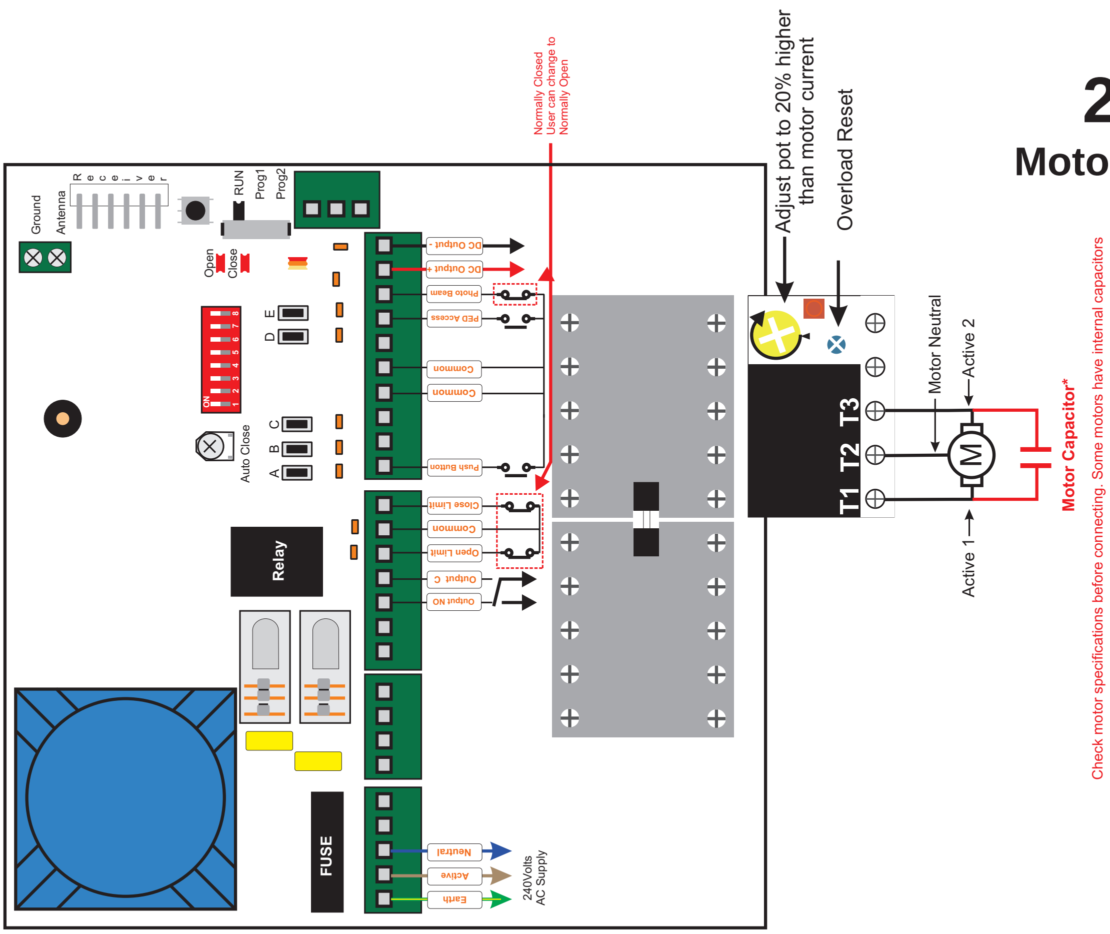


Polarity of Output Power Lines

	Forward	Reverse
Active/Neutral	Active	Neutral
Neutral/Active	Neutral	Active
Active1	Active	Active
Neutral1	Neutral	Neutral

240S3E

Motors with 3 Wires



415S1E Series

Controller for 415VAC 3-Phase Motors up to 1.6kW
3-Phase Motors used on Light Commercial Doors, Industrial Roller Shutters, Sectional Doors, Garage and Sliding Doors



415S1E-2.4
or
415S1E-4.0



With Keyswitch and Push Buttons

FEATURES

- Adjustable auto close
- Auto-reset thermal protection
- External key switch for safety and security
- Dead man controls for open and close buttons
- Automatic ground and travel distance calibration
- Photocell, pedestrian and wireless remote control inputs
- Supports NC or NO limit switch inputs or travel timer setup
- Aux relay output to control courtesy lights and other accessories
- 24VDC output to supply external accessories such as loop detectors, swipe cards etc
- Customised models available upon request

DESCRIPTION

The 415S1E industrial controller uses German designed ABB contactors and thermal overloads with phase failure compensation to control the 3-phase motor. The controller uses a dual interlock protection system for extra safety.

Using a toroidal transformer offers the following advantages:

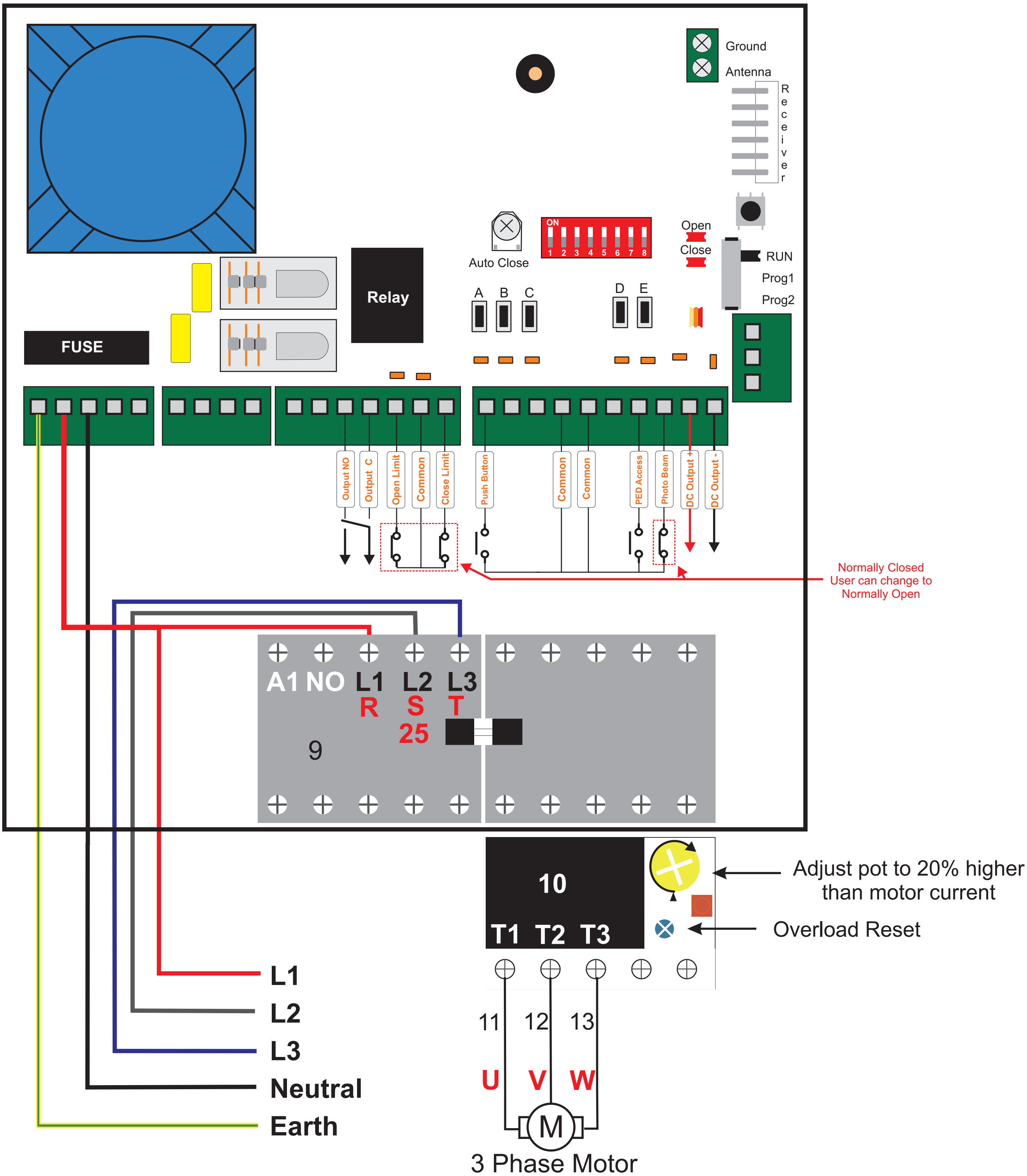
- Excellent efficiency and low leakage losses reducing your electricity consumption
- High isolation which protects the electronics from noisy power lines
- Low magnetic field radiation and no acoustic noise enabling the controller to pass EMC and other stringent radiation tests

This is the quality you should demand when using 3-phase motor controllers.

TECHNICAL DATA

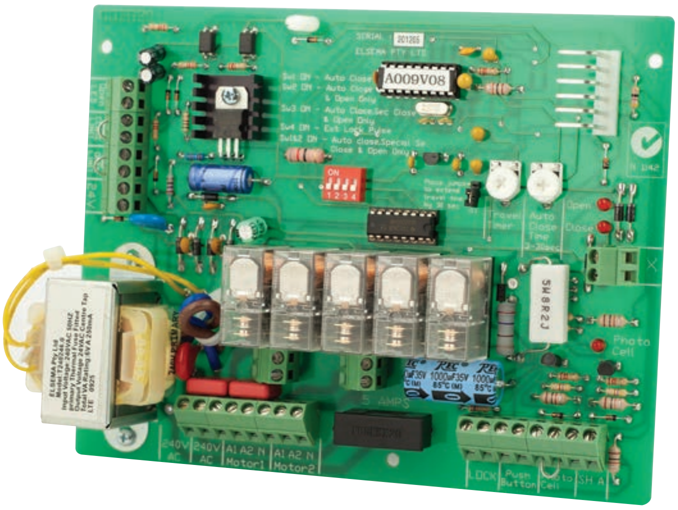
415S1E-2.4: Suitable for 3-phase motors up to 1kW (1.3HP)
415S1E-4.0: Suitable for 3-phase motors up to 1.6kW (2.2HP)
Can be used with NO or NC limit switches
Test buttons for control inputs
Dual interlock for added safety
LEDs indicate when inputs are active. A very handy feature during installation or troubleshooting.
For detailed technical data visit www.elsema.com/auto/415s1.htm

CONNECTION DIAGRAM



COBO30

Controller Card for Double 240 Volt AC Motors
Controller for 240 Volt AC Motors used on Light Commercial Doors, Industrial Roller Shutters, Sectional Doors, Swing and Sliding Gates / Doors



FEATURES

- Adjustable auto close
- Special security closing
- Extended lock pulse
- Pedestrian access input
- Open only input
- Adjustable travel timer (when used with hydraulics)
- Photo cell input

DESCRIPTION

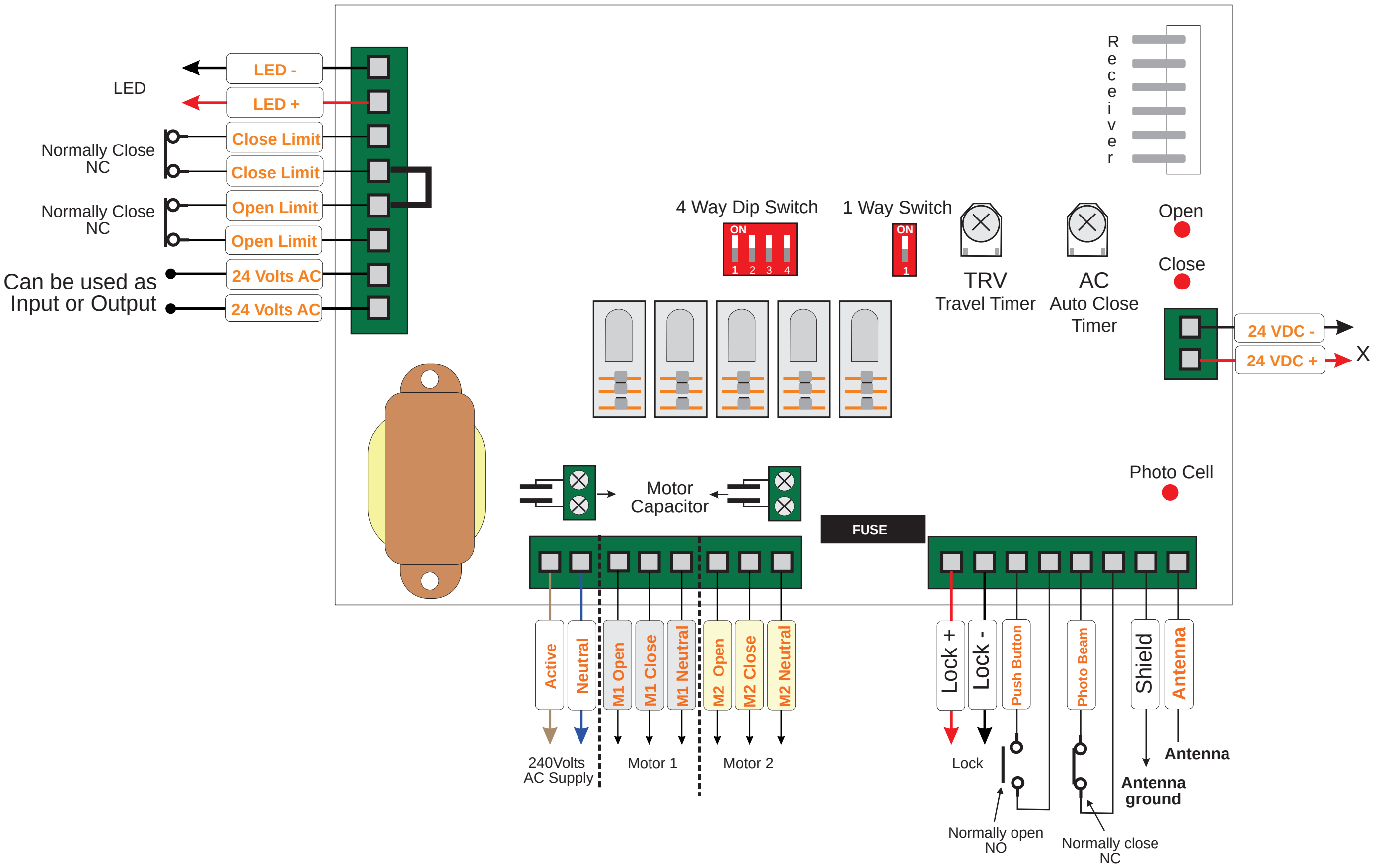
The COBO30 is an upgrade of the older COBO20. The COBO30 has built-in transformer, auto close, open only, security close and extended lock pulse.

The COBO30 card is used to control automatic door/gate that have 240VAC motor with limit switches. It can be used for either single or double gates. Even hydraulic doors can be wired to the COBO30 card. Hydraulic doors have overflow fluid limits which requires the COBO30 to disable the electronic limit switches. This is selectable by linking the limit switches. Limit switches are linked as factory defaults.

TECHNICAL DATA

- Board Size 178 x 137 mm
- Suitable for double 240 Volt AC motors
- NC limit switch inputs
- NC photo cell input
- 4-way dipswitch for mode selection
- For detailed technical data visit www.elsema.com/auto/cobo30.htm

CONNECTION DIAGRAM



PentaFOB® SERIES

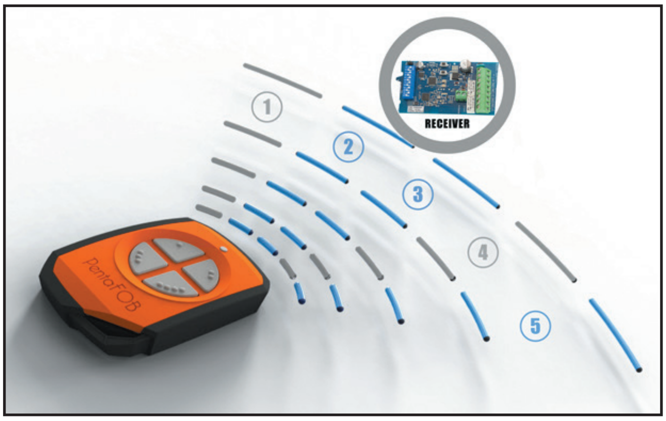
433MHz Keyring Remotes
The next generation of remote controls, superior to normal garage door rolling code remotes



FEATURES

- Keyring transmitter with 1, 2, 4 or 5 channels.
- Simultaneously transmits the encrypted code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia, for Australia
- Competitive pricing
- Works with PCR Pentacode® series of receivers





DESCRIPTION

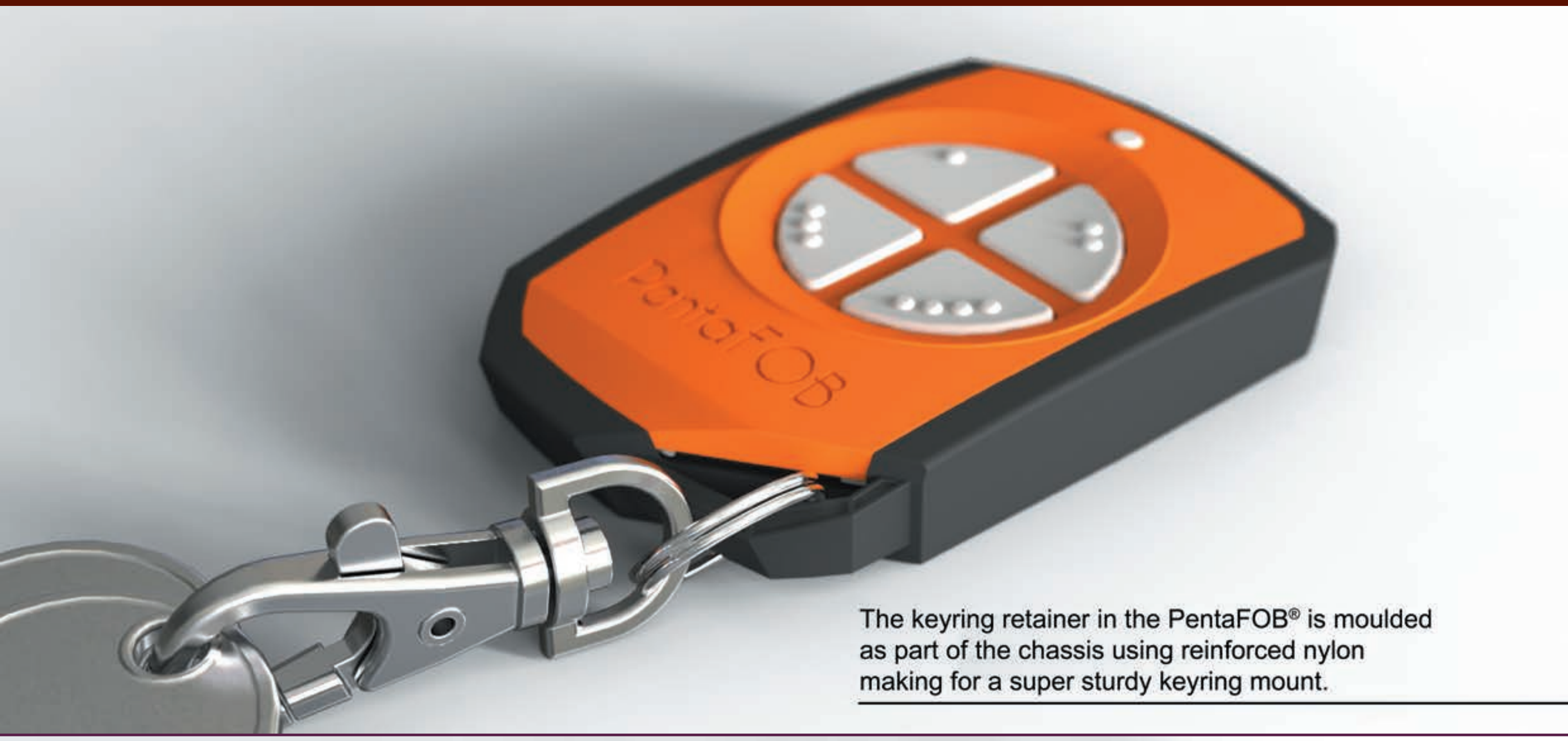
The PentaFOB® uses frequency hopping spread spectrum (FHSS). This means that when a button is pressed, it simultaneously transmits the encrypted code on five different frequencies. This makes it impossible for your remote control to be interfered with or jammed.

Available in 1, 2, 4 and 5 button configurations. The keyring retainer is moulded as part of the chassis using reinforced nylon making for a super sturdy keyring mount.

The PentaFOB® series is an extremely versatile remote control that can be customized through a range of configurations and colours to suit your needs.

TECHNICAL DATA

Over 17 billion encrypted codes
Operating range of up to 70 metres depending on building structure and receiver antenna
15mA (typical) at 3.3 Volts DC supply during transmission
Battery life of 2 years with average use
Operating frequency: 433.100 to 434.700 MHz
Custom front colours available



The keyring retainer in the PentaFOB® is moulded as part of the chassis using reinforced nylon making for a super sturdy keyring mount.



The PentaFOB® is an extremely versatile remote control that can be customized through a range or configurations and colours to suit your needs.



Case Black
Upper Orange



Case Black
Upper Blue



Case Black
Upper Red

Choose from a range of colour options. Mix and match!
If you require a custom Pantone® colour
please contact us for more information

PentaFOB® Programmer

Add, Edit, Delete, Backup and Restore PentaFOB® remotes



PentaFOB Programmer

FEATURES

- Add, Edit and Delete individual PentaFOB® transmitters from the receiver
- Backup and Restore receiver's memory to mini FOB chips
- Easy-to-read with a large LCD display with back light
- 1-touch Master control for quick and easy setup
- 1 backup or restore chip is included
- USB programming cable included
- Password protect the receiver
- Ergonomically designed case
- No battery is required

DESCRIPTION

The PentaFOB® programmer can add, edit and delete individual PentaFOB® transmitters from the receiver's memory. Simply plug-in the USB cable on the back of the programmer and the other end of the cable to the receiver. The programmer will automatically detect the receiver model number and then display the corresponding information. With the easy-to-read 4-line large LCD the setup can be done quickly with clear instructions displayed on the screen.

The programmer has a password feature which allows you to lock the receivers to prevent any unauthorised access to the receiver's memory.

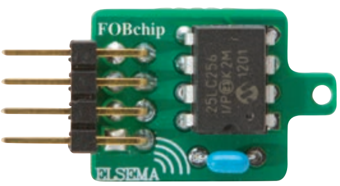
There is a backup or restore memory chip (FOBchip) included with each programmer. This chip is used to backup or restore the contents of a receiver. When there are 100's of transmitters programmed to a receiver the installer normally backs up the receiver memory in case the receiver is damaged or lost.

Additional backup or restore chips are sold separately.

TECHNICAL DATA

Dimensions	102mm x 140mm x 50mm
Display	4-Line LCD display

ACCESSORY



FOBCHIP: BACKUP AND RESTORE CHIP. USE THIS MEMORY CHIP TO BACKUP OR RESTORE ALL PROGRAMMED REMOTES IN A RECEIVER.



FOBCABLE: USB CABLE TO CONNECT THE PROGRAMMER TO THE PENTA SERIES RECEIVERS



FEATURES

- Keyring transmitter with 2 or 4 channels
- Dual Coding System simultaneously transmits the code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia, for Australia
- Competitive pricing



DESCRIPTION

The PentaCode® dual coding system gives the installer the option to use the classic 12-way dip switch coding or one of over 17 billion encrypted codes.

With the 12-way dip switch, just match the keyring remotes and the receiver's dip switch and it's coded. No need for clumsy programmers, memory chips or computer databases to store the code.

With the encrypted code you switch all the 12-way dip switches OFF and the remote and receiver automatically goes into the encrypted coding.

TECHNICAL DATA

12-way dip switch coding or one of over 17 billion encrypted codes
Option of 2 or 4 buttons
Operating range of up to 80 metres depending on building structure and receiver antenna
18mA (typical) at 12 Volts DC supply during transmission
Battery life of 1.5 years with average use
Operating frequency: 433.100 to 434.700 MHz
Custom print available for front labels
For detailed technical data visit www.elsema.com/auto/pck43302.htm

PCR SERIES

Penta® Series Receivers 433MHz
Receivers to match PentaFOB® and PentaCode® Series Keyring Remotes



2-Channel Standalone
Receiver PCR43302RE

FEATURES

- 1, 2, 4 or 5 channel versions available
- Plug-in type or with relay outputs
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote control systems on the market
- Designed and tested in Australia
- Wiegand Output, PCR433WG
- Competitive pricing



1-Channel Standalone
Receiver PCR43301RE



Plug in Receiver
PCR43302P

DESCRIPTION

The PentaCode® dual coding system gives the installer the option to use the classic 12-way dip switch coding or one of over 17 billion encrypted codes.

With the 12-way dip switch, just match the keyring remotes and the receiver's dip switch and it's coded. With the encrypted code you switch all the 12-way dip switches OFF and the remote and receiver automatically goes into the encrypted coding.

The receiver is available as a standalone card with relay outputs or as a plug in type with the standard 6-pin connector.

TECHNICAL DATA

Supply PCR43302P: 7 to 36 Volts DC

Supply PCR43302R: 11 to 28 Volts AC or DC (No Case, PCB Only)

Supply PCR43302RE: 11 to 28 Volts AC or DC (With a Weatherproof Case)

12-way dip switch coding or one of over 17 billion encrypted codes.

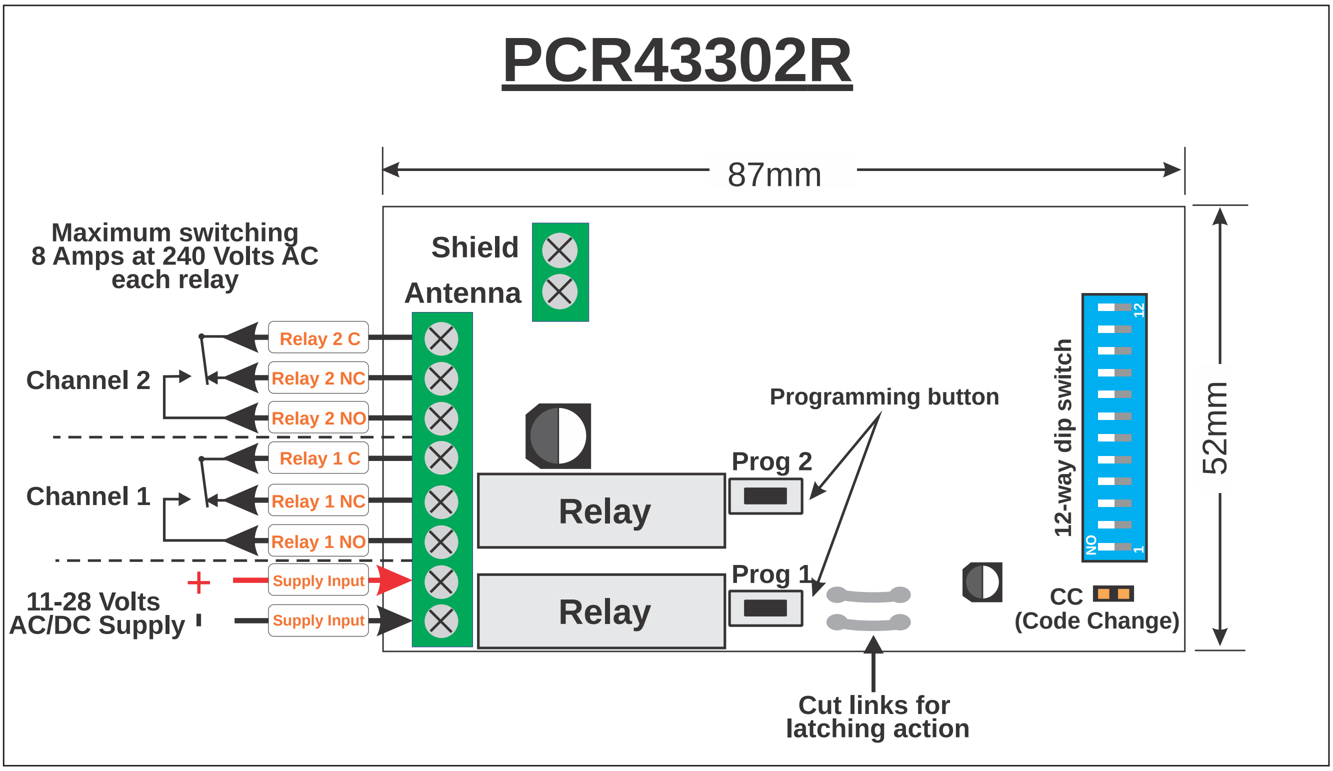
Option of 1, 2, 4 or 5 Relay Outputs or Wiegand Output

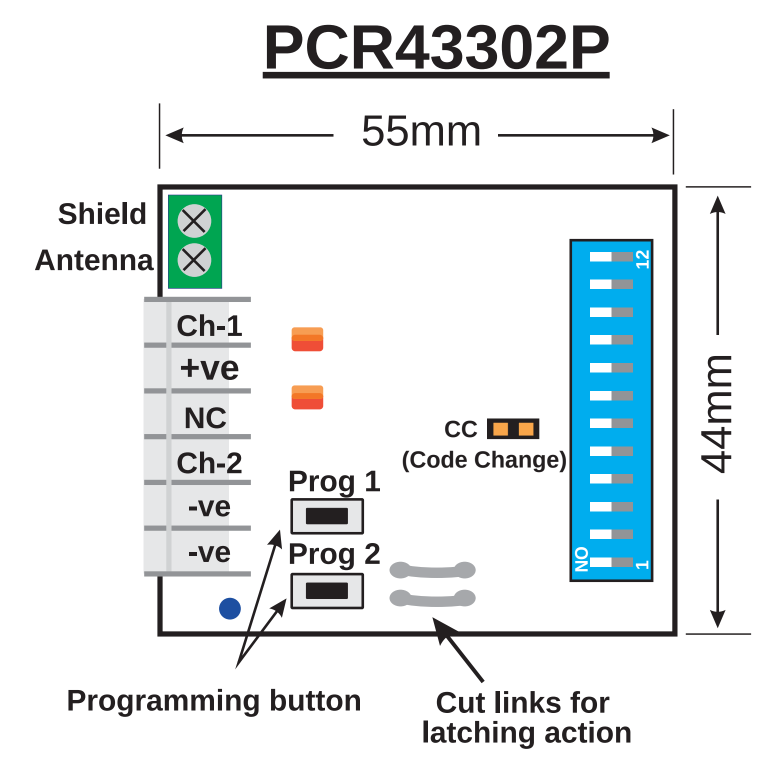
Operating range of up to 80 metres depending on building structure and receiver antenna

Operating frequency: 433.100 to 434.700 MHz

For detailed technical data visit www.elsema.com/prod-pcr.htm

CONNECTION DIAGRAM





WIEGAND OUTPUT PENTA RECEIVER

433MHz Penta Receiver with Wiegand Output



Penta Receiver with Wiegand Output PCR433WG

FEATURES

- Easy to add remote controls to any Wiegand input access control panel
- Remotes are added like cards or RFID tags with no software changes
- Wireless keyless entry offers convenience, security and safety for accessing gates, doors and boom gates
- Wide operating supply voltage and low current consumption
- Easy way to facilitate for handicapped access
- Compatible with PentaCode® remotes
- Easy t4 use dipswitch coding

DESCRIPTION

This receiver allows you to add wireless remote controls to your existing access control systems by connecting the PCR433WG receiver to the access system. The remote controls have a range of up to 80 metres (260 feet) and are available with 2 or 4 buttons. The extra buttons can be used as a panic button allowing a single remote to allow access control and panic alert system.

The receivers Wiegand output interfaces to virtually any commercial access control panel. Remote controls are added as easily as Wiegand cards or RFID tags without any software changes. The ID and facility codes can be matched to the system requirements.

The receiver has a bi-colour LED to act as a status display. Red LED indicates that AC or DC power is “On” and Green LED indicates remote control signal has been received.

TECHNICAL DATA

Supply: 11 to 28 Volts AC or DC
Wiegand Format: 26 bits, other formats available upon request.
Standby: 28mA
Connections: Flying leads 50mm
Operating range of up to 80 metres depending on building structure and receiver antenna
Operating frequency: 433.100 to 434.700 MHz
For detailed technical data visit www.elsema.com/prod-pcr.htm

WIRELESS KEYPAD

Wireless Keypad works with Elsema's Penta series receivers



FEATURES

- Built-in PentaCode® transmitter
- Adjustable transmission time
- 2,000 users, PIN length 4 to 8 digits
- Easy programming
- Long operating range
- Supply can be AC or DC
- Keypad has a backlight
- All programming is done from the keypad
- Built in light dependent resistor (LDR) for anti tamper

DESCRIPTION

The PCKeypad is a wireless keypad with a PentaCode® transmitter built-in. It works with all of Elsema's PCR series receivers. The installer has the option to use the classic 12-way dip switch coding or one of over 17 billion encrypted codes. (Please refer to the user manual)

The PCKeypad is suitable for mounting either indoor or outdoor in harsh environments. It is housed in a strong vandal proof zinc alloy electroplated case.

The Keypad conforms to Ingress Protection 65.

The PCKeypad supports up to 2000 users with 4 to 8 digit PIN.

These features make PCKeypad an ideal choice for gate and door access for homes, shops, factories, warehouses, laboratories, banks and prisons.

TECHNICAL DATA

Supply: 12 - 24 Volts DC or 12 - 18 Volts AC
Dimensions: 128 x 82 x 28 mm
Operating Range of up to 50 metres with line of sight
Adjustable Transmission Time : 1-90 seconds
For detailed technical data visit www.elsema.com/auto/keypad.htm

PHOTOELECTRIC BEAMS

Photoelectric beam for automatic gates and doors

DESCRIPTION

The photoelectric beam works with any Elsema type automatic gate or door controller cards used on sliding, swing or roller doors. It is usually used as a safety device to control automatic gates and doors.

For detailed technical data visit www.elsema.com/auto/photocell.htm

PE1500

Long Range Retro reflective type photoelectric beam with Polarised Polycarbonate case

Type	Polarised retro reflective type
Supply	12-250 Volts AC/DC
Range	15 metres (Outdoor)
	25 metres (Indoor)



PE600

Retro reflective type photoelectric beam

Type	Retro reflective type
Supply	12-250 Volts AC/DC
Range	6 metres (Outdoor)
	10 metres (Indoor)



PE24

12-24 Volts AC/DC Through beam type

Type	Through beam type
Supply	12-24 Volts AC/DC
Range	10 metres (Outdoor)
	30 metres (Indoor)



PE12

Through beam type photoelectric beam

Type	Through beam type
Supply	12 VDC or 8-16VAC
Range	6 metres (Outdoor)
	25 metres (Indoor)



CAB4

4-Core Photoelectric beam wires

Length	30 metres per roll

GSM GATE OPENER

Opens automatic gates and doors with a free phone call. Unlimited range



FEATURES

- Switches relay with free call from mobile phone
- Only authorised numbers can operate the GSM-1000
- No call charges
- Operates from anywhere if GSM network is available. Unlimited range!
- Ignores unauthorised numbers
- 2 digital inputs for sensors or switches
- SMS confirmation of relay switching
- Secure, password protected

DESCRIPTION

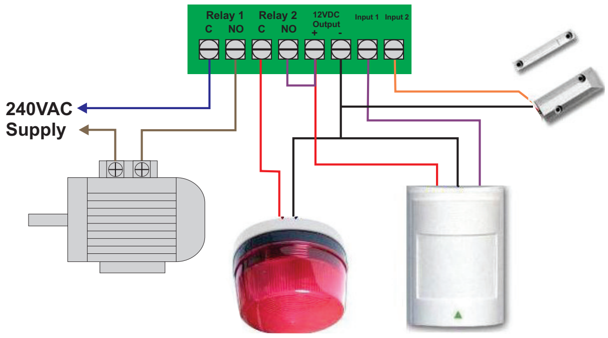
The GSM-1000 works on latest GSM technology. All you need is to insert a valid SIM card and program phone numbers of all users through simple SMS text commands. When an authorised user makes a call to the receiver, it rejects the call after a single ring and activates a relay. Since the call is rejected, the user is not charged for the call.

The GSM-1000 works on GSM network therefore the receiver can be activated from anywhere in the country where GSM network is available. For example you can open your gate or switch on your kitchen lights in Sydney from Melbourne by making a call from your mobile phone and without getting charged. It is portable and as simple as making a call.

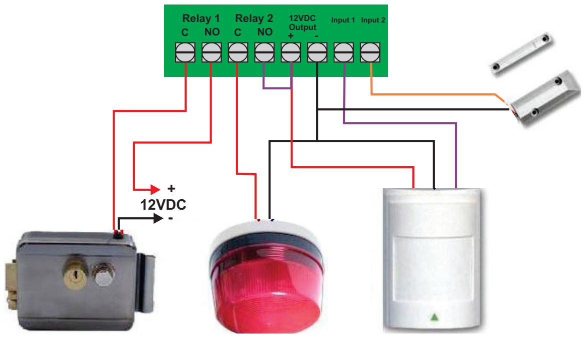
TECHNICAL DATA

Supply: 12 Volts DC (12 Volts DC power pack included)
Dimensions: 120 x 90 x 25 mm
Authorised numbers easily entered by SMS command
Output relays can switch 3A, 240VAC
For detailed technical data visit www.elsema.com/auto/gsm1000.htm

240 Volts AC Application



12 Volts DC Application



VEHICLE LOOP DETECTORS

Vehicle loop detectors for automatic gates and doors

An inductive loop detector is used to detect motor vehicles. When the motor vehicle drives over the detectors wire loop the detectors senses the metal and then a relay is activated. This relay is connected to the motor controller card to automatically open the gate or door. Elsema sells high and medium sensitivity detectors with 1 or 2 channel relay outputs.

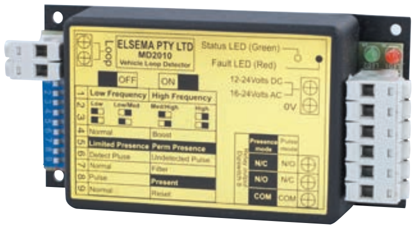
LD30-12 / LD30-24

Sensitivity	High
Supply	LD30-12: 10 to 14 Volts AC/DC LD30-24: 22 to 28 Volts AC/DC
Output	Single relay output



MD2010

Sensitivity	Medium
Supply	12-24 Volts AC/DC
Output	Single relay output



MD12-1

Sensitivity	Medium
Supply	12 Volts DC
Range	Single relay output



MD12-2

Sensitivity	Medium
Supply	12 Volts DC
Output	Double relay output



MD240-1

Sensitivity	Medium
Supply	240 Volts AC
Output	Single relay output



MD240-2

Sensitivity	Medium
Supply	240 Volts AC
Output	Double relay output



For detailed technical data visit www.elsema.com/auto/loopdetector.htm

PRE-MADE INDUCTIVE LOOPS

Inductive loops tune to Elsema's Loop Detectors

Elsema's range of pre-made loops have been time tested and comes with 12 years warranty. Our loops are suitable for all types of installations. Either for cut-in, concrete pour or direct hot asphalt overlay.

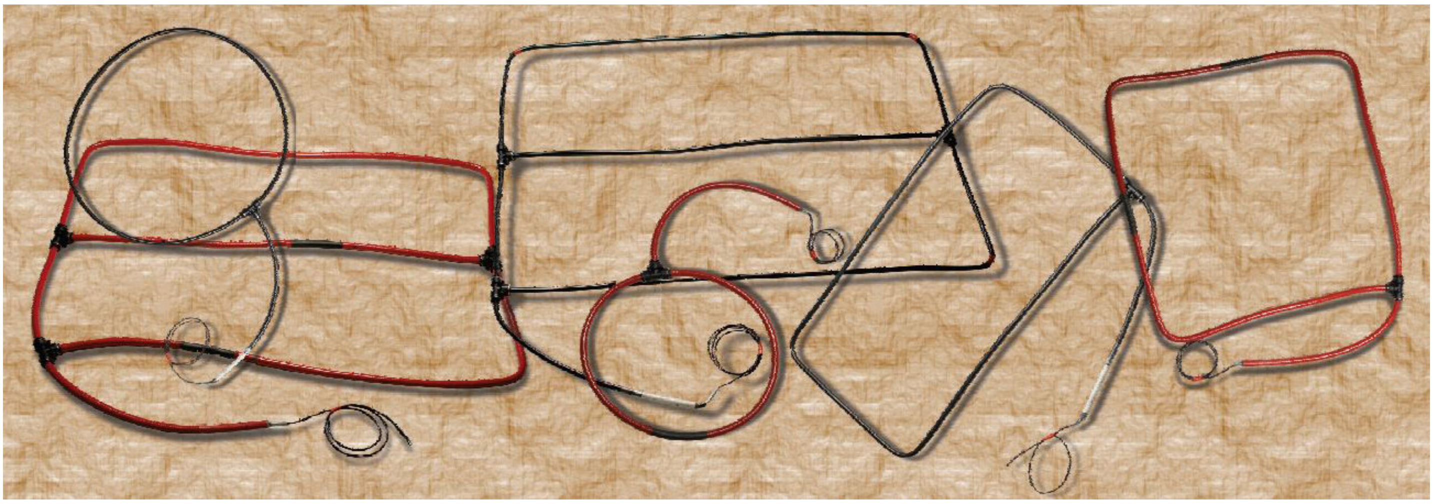
Entire loop and lead is filled with a flexible rubber mixture to prevent moisture from entering the loop wires. This prevents any movement of wires which can lead to false activation. It also prevents wires from stress thus extending its life time.

When the pre-made loops are used for cut-in installations, 45 degree edge cut-outs are not required. These pre-made loops are made using advance technology, are low cost, more accurate and the best in the market.

Pre-made loop sizes:

Loop1200 : 1.2 x 1.2 metres -- 3 metres Lead-in plus 3 metres twisted wire.
Loop1500 : 1.5 x 0.8 metres -- 3 metres Lead-in plus 3 metres twisted wire.
Loop2000 : 2.0 x 1.2 metres -- 3 metres Lead-in plus 3 metres twisted wire.

We can also make custom size loops. Please contact us for your custom loop size.



For detailed technical data visit www.elsema.com/auto/loopdetector.htm

MAGNETIC LOCKS

Electromagnetic locks for automatic gates and doors

DESCRIPTION

Elsema stocks electromagnetic locks for all types of doors and gates. Our models are designed to secure any type of door or gate that closes against a fixed stop. All of our lock components are carefully designed, manufactured and tested to ensure superior quality.

Waterproof Magnetic lock with 270kg holding force

Holding force	270kg
Supply	Can be 12 or 24 Volts DC
Dimensions	200 x 44 x 40mm



Waterproof Magnetic lock with 560kg holding force

Holding force	560kg
Supply	Can be 12 or 24 Volts DC
Dimensions	220 x 64 x 41mm



For detailed technical data visit www.elsema.com/auto/magneticlock.htm

STROBE LIGHTS

Strobe lights for warning or to indicate danger

DESCRIPTION

The ST series of strobe lights flash when appropriate DC voltage is applied to it. These flasher lights can be used in a variety of applications such as warning lights to indicate danger. It can be used on trucks, carts, forklifts or any other application which requires a visual indication of any danger or warning.

Red Strobe Light, 12VDC

Part Number	ST12R
Supply	12 Volts DC
Flashing rate	90 flashes per minute



Red Strobe Light, 24VDC

Part Number	ST24R
Supply	24 Volts DC
Flashing rate	90 flashes per minute

Amber Strobe Light, 12VDC

Part Number	ST12A
Supply	12 Volts DC
Flashing rate	90 flashes per minute



Amber Strobe Light, 24VDC

Part Number	ST24A
Supply	24 Volts DC
Flashing rate	90 flashes per minute

Blue Strobe Light, 12VDC

Part Number	ST12B
Supply	12 Volts DC
Flashing rate	90 flashes per minute



Blue Strobe Light, 24VDC

Part Number	ST24B
Supply	24 Volts DC
Flashing rate	90 flashes per minute

For detailed technical data visit www.elsema.com/auto/strobelight.htm

REMOTE CONTROL & BACKUP BATTERIES

Batteries for handheld remotes and backup for automatic gates

DESCRIPTION

Elsema has a range of batteries for all its products. Our range includes batteries for keyring remotes to backup of 24 or 12 volts automatic gates and doors. Backup batteries combined with smart solar chargers and solar panels, provides you with a hassle-free operation 24 hours a day - even during power blackouts.

3 Volt lithium battery

Part Number	CR2032
Voltage	3 Volts
Type	Lithium



Energizer 12 Volt alkaline battery

Part Number	A23
Supply	12 Volts
Type	Alkaline



9 Volt carbon battery

Part Number	6F22
Supply	9 Volts
Type	Carbon



Energizer 9 Volt alkaline battery

Part Number	6LR61
Supply	9 Volts
Type	Alkaline



12 Volt, 2.6Ah rechargable lead acid battery



Part Number	Lab12-2.6
Supply	12 Volts, 2.6Ah
Type	Sealed Lead Acid
Dimensions	178 x 35 x 67mm

12 Volt, 1.2Ah rechargable lead acid battery

Part Number	Lab12-1.2
Supply	12 Volts, 1.2Ah
Type	Sealed Lead Acid
Dimensions	97 x 45 x 59mm



12 Volt, 7.0Ah rechargable lead acid battery

Part Number	Lab12-7.0
Supply	12 Volts, 7.0Ah
Type	Sealed Lead Acid
Dimensions	151 x 65 x 98mm



For detailed technical data visit www.elsema.com/auto/battery.htm

DESCRIPTION

Elsema has a range of deep cycle batteries for solar gates or any application that requires a high cycling life with high efficiency and 5 year long service life. Backup batteries combined with smart solar chargers and solar panels, provides you with a hassle-free operation 24 hours a day - even during power blackouts.

12 Volt, 12Ah rechargable deep cycle battery

Part Number	Lab12-12D
Supply	12 Volts, 12Ah
Type	Deep Cycle
Dimensions	151 x 98 x 100mm



12 Volt, 20Ah rechargable deep cycle battery

Part Number	Lab12-20D
Supply	12 Volts, 20Ah
Type	Deep Cycle
Dimensions	181 x 77 x 169mm



12 Volt, 30Ah rechargable deep cycle battery

Part Number	Lab12-30D
Supply	12 Volts, 30Ah
Type	Deep Cycle
Dimensions	166 x 125 x 175mm



DESCRIPTION

Elsema battery chargers are designed to quickly and effectively charge batteries to its full capacity. They can be used for standalone solar applications or for backup systems with AC supply. The BACH12-1200 and the BACH24-1200 chargers batteries with 1.2 Amps max current while the CMP12 is designed for solar application. The CMP12 automatically detects the system voltage of either 12 or 24 Volts and adjusts its charging voltage accordingly.

1.2 Amps charger with LED indication

Part Number	BACH12-1200 : 12 Volts BACH24-1200 : 24 Volts
Charging Current	1.2 Amps



10 Amps solar charger with LED indication

Part Number	CMP12 12/24 Volt DC Automatic voltage selection
Charging Current	10 Amps



FEATURES

- Over-load protection
- Short circuit protection
- Reverse polarity protection
- Over charging protection
- Under voltage protection

Should only be used for Solar Application

LED indication

LED	Continious "On"	Blinking	Off
Charge (Green)	Charging	Float mode	Charging has stopped
Load (Green)	Load is powered	X	Load is not powered
Battery (3 Red)	Battery level		

For detailed technical data visit www.elsema.com/auto/charger.htm

SP10, SP20 & SP40

High Efficiency 10, 20 and 40 Watt Solar Panels

SP10





SP40



SP20

FEATURES

- 20 years 80% power guarantee, 10 years 90% power guarantee
- High efficiency, monocrystalline silicon solar cells
- Uses high transparency 3.2mm tempered low iron glass
- Improved low-light performance
- Anodized aluminum alloy frame

DESCRIPTION

The SP range of solar panels provides you with an eco-friendly power solution for your automatic gate or door applications. These solar panels are ideal for sites without power lines, saving the cost of running power lines to your gates.

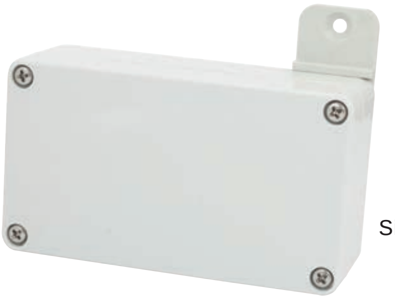
Solar panels combined with our intelligent battery charger and suitable battery will supply your gates or doors with free solar energy.

TECHNICAL DATA

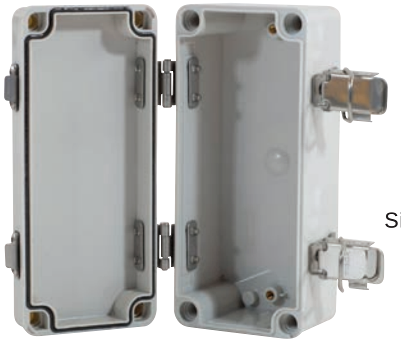
Model	SP10	SP20	SP40
Rated Power (Watts)	10 Watts	20 Watts	40 Watts
V_{mp} (Volts)	17.00 V	17.02 V	17.2 V
I_{mp} (Amps)	0.59 A	1.16 A	2.33 A
V_{oc} (Volts)	21.5 V	21.4 V	21.4 V
I_{sc} (Amps)	0.68 A	1.25 A	2.5 A
Dimensions (mm)	396 x 289 x 23	650 x 296 x 25	650 x 542 x 30
Weight (kg)	1.4	2.5	4.5

CASES

Cases are all to EN60529 standard with Ingress Protection of IP66.
Suitable for temperature range -40 to +80 degrees.



C0611
Size 65 x 115 x 40 mm



C0818
Size 80 x 180 x 70 mm



C1015
Size 100 x 150 x 70 mm



C1015T
Size 100 x 150 x 70 mm
Plastic Latch and Transparent Cover



C1020T
Size 100 x 200 x 70 mm
Plastic Latch and Transparent Cover



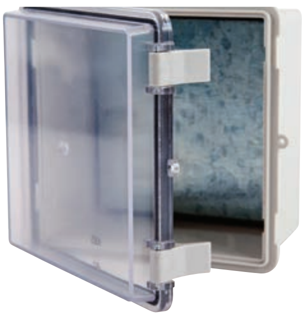
C1020T
Size 100 x 200 x 70 mm



C1217
Size 125 x 175 x 75 mm



C1515
Size 150 x 150 x 90 mm



C1515T
Size 150 x 150 x 90 mm
Plastic Latch and Transparent Cover



C1520
Size 150 x 200 x 100 mm



C1717
Size 175 x 175 x 75 mm



C1722
Size 170 x 220 x 110 mm



C1722T
Size 170 x 220 x 110 mm
Plastic Latch and Transparent Cover



C1725
Size 175 x 250 x 75 mm



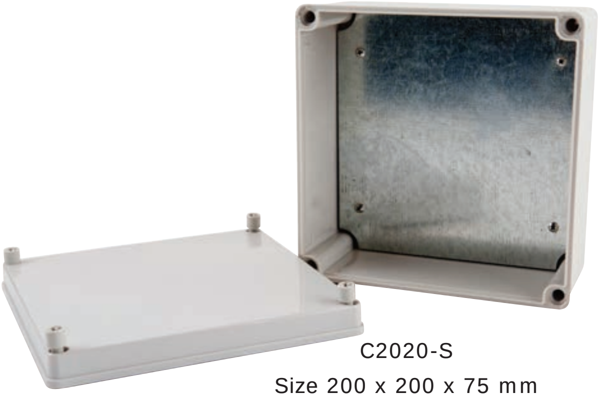
C1725-1
Size 175 x 250 x 100 mm



C1929
Size 190 x 290 x 140 mm



C1929T
Size 190 x 290 x 140 mm
Plastic Latch and Transparent Cover



C2020-S
Size 200 x 200 x 75 mm



C2828
Size 280 x 280 x 130 mm



C3428
Size 340 x 280 x 130 mm



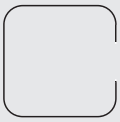
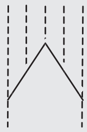
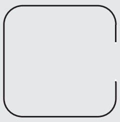
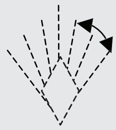
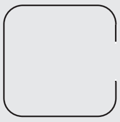
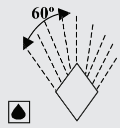
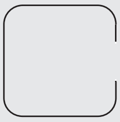
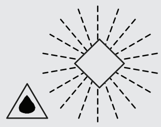
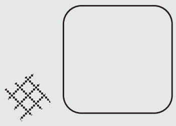
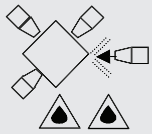
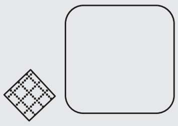
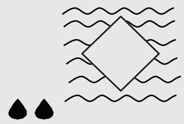
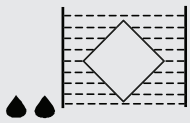
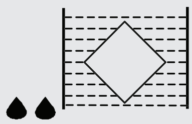
C3428T
Size 340 x 280 x 130 mm
Transparent Cover

International Protection (IP) Ratings

IP54 = IP Letter Code _____ IP

1st Digit ____________ 5

2nd Digit ___________ 4

1st Digit	Protection from solid objects		2nd Digit	Protection from moisture	
0	NON-PROTECTED		0	NON-PROTECTED	
1		Protected against solid objects greater than 50mm	1		Protected against dripping water
2		Protected against solid objects greater than 12mm	2		Protected against dripping water when tilted up to 15º
3		Protected against solid objects greater than 2.5mm Ø	3		Protected against spraying water
4		Protected against solid objects greater than 1.0mm Ø	4		Protected against splashing water
5		Dust protected	5		Protected against water jets
6		Dust tight	6		Protected against heavy seas
			7		Protected against the effects of immersion
			8		Protected against submersion

LOCAL DISTRIBUTOR

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